ANNEX 4

READING COMPREHENSION
Strategies and Tools for Teachers of MTB-MLE Classrooms

Prepared by:
The Reading Comprehension Interest Group
ANNEX 4: Extended Guidance on Teaching Comprehension Strategies/Skills

This annex offers fuller explanations on how to teach children to use certain comprehension strategies/skills for those who would like more detailed information.

These “Deeper Dive” sections provide more complete definitions, sample lesson plans, and/or other activities and graphic organizers that can be used to teach the comprehension strategy/skill.

Guidance for Ministry of Education officials and Teacher Trainers

It is important for both trainers and teachers to engage in participatory learning of these topics. Trainers at all levels (trainers of master trainers, master trainers, and trainers of teachers) will need to master the skills outlined in these materials in order to provide the highest quality of skill building for teachers. The training at all levels has to be of the highest quality. Each trainer should receive a chance to practice in front of peers, receive constructive feedback, and have further opportunities to improve their training practices.
All training activities should follow norms of equity. This means that there should be equal opportunity for all to participate, to improve, and to learn. Everyone’s voice is valuable and no one knows everything. All participants are to be treated as adults who come with considerable knowledge and experience. Trainers are encouraged to build on the knowledge and strengths of the participants. The emphasis on the training is cooperation so that trainers grow together and are able to provide the best quality training possible. Developing a training manual is a good idea to ensure that all training sessions are completed similarly, cover the same content, and provide similar experiences across groups of participants.

The focus of teacher training is to ensure that the teachers know, understand, and can apply the skills and techniques found in these materials. This means that the teachers should be guided to actively participate and apply these learning strategies to real situations within the context of training. Teachers should be provided time to peer teach these strategies and receive constructive feedback. When possible, include a practicum as part of the training. This is where all teachers will practice applying the teaching strategies using sample texts with students from a local school.

Trainers should move around the room during teaching practice. Specific, constructive feedback is an important part of practice. When trainers observe and provide specific, constructive feedback to teachers, those teachers understand the skills they have learned and how to further improve their practices. Teachers will need to hear what they are doing well, and also where and how they can improve. It is important to “sandwich” constructive feedback between positive praise. An effective feedback format sounds like: a comment describing what they are doing well, a specific area for improvement, and positive praise or something for them to consider as they continue to practice.

Once teachers receive feedback, they can be prompted to reflect on their practice. They can answer questions such as: What went well in my lesson? What did not go well in my lesson? How can I change instruction to address what did not go well? Do I need to speed up, slow down, or provide more instruction? Did I provide enough time for learners to practice applying the skill? Did I provide specific, constructive feedback to the learners?

Training that provides time for content introduction and discussion, active practice and application of learned skills, as well as support for instructional reflection has the potential to change the way that teachers teach. The goal of all instruction is for teachers to provide active, participatory, and hands-on learning experiences for their students. This means that an appropriate Trainer: Trainee ratio is necessary. Typically, training is most effective when the ratio is 1 trainer to a maximum of 25 trainees. When there are more than 25 trainees for each trainer, the trainer is less able to manage the needs of the training participants and provide specific, constructive feedback to all trainees.
Guiding Principles and Practices of Instruction for Teacher Trainers and Teachers

Because teaching is a complex interplay of weighing options, making decisions and solving problems that come in a dizzying array of shapes and sizes, it is extremely helpful to ground all of the choices that have to be made, whether long-term or on a minute-to-minute basis, with a set of commitments to our students. Those commitments can serve as an anchor by keeping teachers’ lessons aligned with their purpose. As teachers are making those endless cognitive and affective decisions, they can refer back to their core commitments and decide which choices serve the outcomes they desire for their students. Keeping the larger contexts of local and global environments in mind, teacher educators can make their students aware of which goals are vital to the children who will be entrusted to them. Three such commitments are:

1. Foster confidence and self-direction
2. Prepare students for the collaborative, problem solving work of the 21st century.
3. Cultivate empathy and empowerment through words and actions.

Example teaching practices that match up with these 3 goals

Practices that foster confidence and self-direction:

From the beginning of life, we all learn by imitation. Students internalize behaviors they observe. When teaching the complex behaviors of reading and writing, teach by demonstration. Teaching reading by demonstration requires verbally sharing your thought processes. Think Aloud (see pg 24) as you read and articulate the strategies you are using (e.g., predicting, questioning, inferring). Demonstration combined with discussion builds awareness, which is necessary for fostering metacognition. The road to self-direction is learning from the inside out. Provide teachers with ample opportunity to gather in readers’ and writers’ circles where they can work collaboratively, reading selected books deeply and writing their own personal narratives. Model how specific and supportive feedback is provided.

Prepare students for the work of the 21st century:

Foster the mindset that reading (and writing) are problem-solving processes. Reading requires repeatedly figuring out how to pronounce words (particularly in opaque languages like English); getting word meaning through context clues; interpreting figures of speech, similes and metaphors; inferring the connection between sentences; recognizing gaps that need filling; making inferences to fill those gaps; and deciding on message or theme.

When you teach with a problem-solving approach, encourage sharing diverse answers. You want to reveal students’ thinking processes for the teachers’ information about her/his students’ needs and abilities.
and the students’ awareness of different strategies. Instead of shutting down answers and moving on to another child, use the opportunity to teach by coaching. Build on what the student knows by guiding her/him with your questions. (Ex. What can you do next to help yourself understand this word?) Create a classroom climate in which children learn that “mistakes” are welcomed opportunities for extending learning. Avoid praising answers. When we praise the answer given, the other students think their answer is not necessary. An affirming nod works to keep the conversation going.

Distinguish between questions that require a factual, right or wrong answer and questions that require original thought such as inferences, conclusions, hypotheses, and opinions and respond to them appropriately (see pg 40-41, 46-47, & Annex 4 pg 16-17). When you ask the latter, begin with the words, “What do you think…”, which signals the answer is not given in the text.

**Cultivate empathy and empowerment through both words and actions:**

Make the classroom a place where children are safe from being embarrassed. Explicitly teach students how diverse we all are and that everyone in our class will not all be doing the same thing at the same time. Avoid assigning work that is a mismatch for students’ cognitive abilities. Do not tolerate bullying or hurtful remarks.

Take the mystery out of complex behaviors. Teach strategies explicitly (see Annex 2 pg 67 & Annex 4 pg 6). When we break strategies, such as making inferences, into a sequence of steps, students are able to see how some students arrive at answers that they cannot and dispel the idea that they are not as smart as others. Foster a growth mindset by sharing drawings of brain cells (see pg 9) and explain that their intelligence is always growing.

Releasing responsibility (see pg 17-18) and creating space for students to guide their own learning is essential for empowering students. Prompting them to decide for themselves how they will solve a problem or approach a task is a necessary culmination to teaching a strategy. Students need to be able to demonstrate to themselves that they own the strategy they were taught.

When your intention is for your students to be competent, confident, self-directed learners, staying in a teacher-directed mode of instruction has to give way to stepping back and letting students monitor, regulate and evaluate their work. Students can teach each other by giving classmates their feedback and sharing their strategies.

Teacher trainers can shift the paradigm. They can teach that instruction can no longer just center on getting the right answers. Answering the teachers’ questions and fixing the mistakes in their writing does not make young students stronger readers or writers. Instruction has to make room for conversation about the behaviors of proficient readers and writers (see pg 14).
Summary of Proficient Reader Strategies

Proficient Reader Strategies

- **Make connections** with prior knowledge and experience
- **Visualize** (picture what the words say)
- **Predict** what will come next
- **Infer** (think about what is not stated)
- **Ask questions** about what you want to know
- **Summarize** (categorize details to chunk information)
- **Synthesize and determine important ideas** (infer theme or message)

The sequence for teaching comprehension strategies explicitly with MTB-MLE

**Purpose**
Making predictions (educated guesses) about what may happen in the text students are reading, increases their interest, attention, comprehension and recall. Students learn to predict on their own when we explicitly talk about our predictions and show them how we predict before and during reading by using clues from the text and illustrations.

The lesson models below prepare students for making predictions and answering their own questions when they (1) read independently and when they (2) read and discuss the text with the direction of their teacher.
How do I teach my students what predictions are, why we want to predict when we read and how to make thoughtful predictions?

Note: The following scripted lesson will teach students the What, Why and How of predicting. It is an example of how we can create a space for teaching an essential reading strategy before applying it to the content of the curriculum. No matter the age of the learner, our brains allow us to focus on learning one thing at a time.

Step 1. Name the strategy: Tell students what you are teaching and why you are teaching it.

Teacher: I am going to show you something I do that helps me understand and remember what I read. I don’t want to read the words (point to the pages of words in a book) and not know what I read. That doesn’t sound like much fun, does it? I make predictions. You can make predictions when you read too.

Step 2. Relate the strategy to the students’ prior experience.

Teacher: You make predictions all the time. When you go outside and see big grey clouds in the sky, you probably make the prediction that it is (pause) going to rain. (Give more examples children relate to, before asking them to fill-in the prediction.)

Step 3. Develop the concept of predicting.

Teacher: Tell students, “A prediction is my guess about what will happen. Predicting is fun to do because it makes me really want to know if I guessed right. I like when my guess is right.

• Let’s do some predicting. If I come to school coughing and sneezing, I predict that some of my classmates may ___________. (Give students many turns. Point out there can be more than one good prediction.)

• Play the following prediction game with the whole class. Hold up a paper bag with a mystery item inside. Explain that when you want to predict, you first gather clues. Model how you gather clues about the item by feeling for size, shape, weight and listening for the sound it makes when you shake it. Think about what object would match the clues. Have students think-pair-share what they predict will be in the bag. Invite children to share out their predictions. When students confirm they want to know, tell them, “Good readers always want to know the answers to their predictions too.” Proceed to take the object out of the bag. Share observations about information they used for their predictions. Follow this demonstration with students working in groups predicting what is in the bag they have been given. Review the strategy you used.
Step 4. Demonstrate how you predict when you read.

Teacher: “Even before I start reading, I start making predictions. I use the book cover or an illustration; I read the title and search the picture for details.” For more advanced students, include the genre and author for your prediction. Model how you gather clues, connect the clues and predict about characters, setting, plot, and story problem. For non-fiction, predict what information will be on the pages.

Step 5. Read aloud and think aloud.

Model how you stop when you are reading to make new predictions and explain why. Confirm or reject former predictions.

Step 6. Provide for the gradual release of responsibility.

After you model for students, they will want to say what their predictions are while you read aloud. Let them. Encourage them to try thinking aloud. Allow students to initiate the predicting when they read during whole group activities.

- Group students in pairs or triads to take turns reading aloud and thinking aloud. Ask the listeners to share out, after reading, what their partners thought about while they were reading.

MTB-MLE tips

1. If appropriate, model the think aloud in more than one language (ex. translating key words/phrases in MT and the LoTL as happens when we think)
2. Allow children to provide their responses in MT or LoTL and then ask them to expand on their answer, if needed, and then add the LoTL vocabulary to the conversation (ex. Just like [student name] said, the story discusses [word in LoTL].)

Step 7. Assess students’ use of the strategy with an evidence-based task.

Gather evidence during: (1) guided reading by observing the students’ use of prediction while reading and thinking aloud. (2) Observe dialogue between students during paired reading. (3) Gather notes students make at the end of each page before turning to the next page. (MT and LoTL)

Step 8. Make the conversation -about the strategies you are teaching- part of your conversations about texts (stories or information).

Move back and forth between conversations about what students learned, questioned, and puzzled over and conversations about what they did (their strategies) before, during and after reading. Remember to teach both the reader and what they are reading.
Types of Assessment Questions

a. **Check in**: What did students hear? This response requires repeating all or part of material. It is often confused with assessing for understanding.

b. **Clarify**: Ask questions that: define words; use visuals or actions to explain; break down syntax; translate expressions; make connections between the details.

c. **Assess understanding (literal and inferential)**: Understanding requires USE of knowledge. Students are asked to do something or show evidence that they processed the information they read. Examples: What do you picture? Can you explain what happened? Tell in your own words. …and up the higher order thinking chain.

d. **Reveal strategies (behaviors)**: Foster students’ metacognition by asking them to share/build a repertoire of strategies. Ask, ‘How did you get your answer? What words told you that?’

e. **Synthesizing questions**: Ask students to make connections: ‘What was the author talking about here? What do all the sentences talk about?’

f. **Extend thinking**: Ask questions that take students beyond what they have understood – make generalizations about characters, place, time, dilemmas, and implications for themselves and for the future.

g. **Promote independent thinking**: Structure discussions that allow for unprompted responses to students’ reading, such as journaling, student-guided discussions, reciprocal reading. Use mental self-management to select needed strategies.
### Glossary of Text Features with Examples:

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Titles, subtitles, headings, and subheadings</strong></td>
<td>Divide the text into discrete sections, which are labeled with the main idea of the section.</td>
</tr>
<tr>
<td><strong>Table of Contents</strong></td>
<td>Lists the titles/subtitles of sections of the text with the page numbers they start on.</td>
</tr>
</tbody>
</table>

**Example 1:**

Image of page from *Three-Fifths of Other Persons: A Promise Deferred* by David D'Urso and Marvin Aronovitz.

> Divide the text into discrete sections, which are labeled with the main idea of the section.

From: Free-at-last-US_civil_rights ([freekidsbooks.org](http://freekidsbooks.org)) by Michael Jay Friedman

**Example 2:**

Table of Contents from *Why Do Earthquakes Happen?* by Natasha Vizcarra.

> What is an Earthquake? | 2
> Earth’s Plates | 5
> How are Earthquakes Measured? | 9
> Can Earthquakes Be Predicted? | 13
> Glossary | 15
> Index | 16

From: Save the Children’s Why Do Earthquakes Happen? by Natasha Vizcarra
### Captions
Words below/beside a picture or illustration that describe what is happening in the image

**Salvador Earthquake, 2001**
*Richter Scale: 7.7*

*From Save the Children’s Why Do Earthquakes Happen? by Natasha Vizcarra*

### Pictures or Illustrations
Images that help to visualize what the text is describing

As we made our way back to the boat, we were thrilled to see a **manta ray** ‘flying’ through the water with two remora fish in tow.

*From Pratham Books’ [DIVE!](https://www.prathambooks.org) by Rajiv Eipe*
<table>
<thead>
<tr>
<th>Diagrams &amp; Labels</th>
<th>Use an illustration or image which are matched, often by lines or arrows, with written words that describe/name different parts of the image</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>From Pratham Books’ <a href="#">Fossils: Tales of Long Ago</a> by Anupama Chandrasekaran</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tables / Graphs</th>
<th>List information described in the text in the form of tables or graphs; children need to be taught how to read and understand these text features</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>From Save the Children’s <a href="#">Why Do Earthquakes Happen?</a> by Natasha Vizcara</em></td>
</tr>
<tr>
<td>Timelines</td>
<td>List the dates, in chronological order, that events took place</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td><strong>Life &amp; Times of Anna: A Timeline</strong></td>
<td></td>
</tr>
<tr>
<td>23 August, 1918 - Anna Mani is born in Peermedu in Kerala.</td>
<td></td>
</tr>
<tr>
<td>1940 - She gets a scholarship to work at CV Raman’s laboratory in Bangalore.</td>
<td></td>
</tr>
<tr>
<td>1945 - She leaves for England to study meteorology.</td>
<td></td>
</tr>
<tr>
<td>1948 - She returns and joins the Indian Meteorological Department in Pune.</td>
<td></td>
</tr>
</tbody>
</table>

Pratham Books’ [Anna’s Extraordinary Experiments with Weather](#) by Nandita Jayaraj

<table>
<thead>
<tr>
<th>Sidebar</th>
<th>Extra information may be placed in boxes outside the main text; it’s helpful to teach children when to read the sidebars vs. the main text</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DID YOU KNOW?</strong></td>
<td></td>
</tr>
<tr>
<td>1. Bees are hard workers. In winter, they can live up to nine months and in summer only up to two months. All work and no play does not make them dull.</td>
<td></td>
</tr>
<tr>
<td>2. A curious case of the bees is that when they do the work of a younger bee, their brain stops ageing. It starts working like a younger bees’ brain. Do you now wish you were a bee?</td>
<td></td>
</tr>
<tr>
<td>3. Bees recognize faces just like human beings do. Each part of the face is first taken separately, then put together to make up the face. Remember not to anger a bee!</td>
<td></td>
</tr>
</tbody>
</table>

*From Pratham Books’ [Why Do Bees Buzz?](#) by Nabanita Deshmukh*
<table>
<thead>
<tr>
<th><strong>Glossary</strong></th>
<th>List key words from the book and their definitions; sometimes illustrations are included</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Corals</strong></td>
<td>are both plants and animals. Thousands of little algae live inside corals, and give them energy to grow. They have hard outer skeletons and grow into many different shapes.</td>
</tr>
<tr>
<td><strong>Plankton</strong></td>
<td>is the main source of food for many sea creatures. They are a mix of algae, bacteria, tiny animals, and the eggs and larvae of larger animals that float about with the ocean currents.</td>
</tr>
<tr>
<td><strong>Feather stars</strong></td>
<td>may look like plants, but they’re really animals. They use their feather-like ‘arms’ to catch and eat bits of floating plankton.</td>
</tr>
<tr>
<td><em>From: Pratham Books’</em> <strong>DIVE!</strong> <em>by Rajiv Eipe</em></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Index</strong></th>
<th>List key topics/terms from the text and the page numbers where they are found, usually found at the back of a book.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>faults,</strong> 7</td>
<td></td>
</tr>
<tr>
<td><strong>outer crust,</strong> 5-6</td>
<td></td>
</tr>
<tr>
<td><strong>Richter Scale,</strong> 11-12</td>
<td></td>
</tr>
<tr>
<td><strong>seismograph,</strong> 9-10</td>
<td></td>
</tr>
<tr>
<td><strong>tectonic plates,</strong> 6-7</td>
<td></td>
</tr>
<tr>
<td><em>From Save the Children’s Why Do Earthquakes Happen? by Natasha Vizcarra</em></td>
<td></td>
</tr>
</tbody>
</table>
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f. Pratham Books’ Anna’s Extraordinary Experiments with Weather: CC BY 4.0 license
### Deeper Dive: Making Connections

**Scaffold Questions: Using Prior Knowledge/Connections Before, During, and After Reading**

<table>
<thead>
<tr>
<th>Using Prior Knowledge Before Reading</th>
<th>Using Prior Knowledge During Reading</th>
<th>Using Prior Knowledge After Reading</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>For Informational Texts:</strong></td>
<td><strong>For Informational Texts:</strong></td>
<td><strong>For Informational Texts:</strong></td>
</tr>
<tr>
<td>What do I know about the topic?</td>
<td>What else do I know about the topic?</td>
<td>How did my prior knowledge help me learn about ...?</td>
</tr>
<tr>
<td>• Look at cover</td>
<td>How did my prior knowledge help me understand the part about ...?</td>
<td>What prior knowledge was most helpful?</td>
</tr>
<tr>
<td>What do I remember about the topic now?</td>
<td>This reminds me of...</td>
<td>I used what I knew about... to help me understand ....</td>
</tr>
<tr>
<td>• Look at illustrations, headings, and captions</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>For Narrative Stories:</strong></th>
<th><strong>For Narratives Stories:</strong></th>
<th><strong>For Narrative Stories:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Have I ever...?</td>
<td>What connections am I making now? (to my own life, other texts, or the world?)</td>
<td>What connections am I making now (to my own life, other texts, or the world?)</td>
</tr>
<tr>
<td>• Look at title, cover, and back of book.</td>
<td>This reminds me of...</td>
<td>Which connections helped me understand the text the most?</td>
</tr>
<tr>
<td>What connections am I making?</td>
<td>I already knew... because...</td>
<td></td>
</tr>
<tr>
<td>Preview text, titles, illustrations, captions.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• I think I know...</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• My connections are...</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Deeper Dive: Making Inferences

**Introductory Guidance for Teachers:**

In the description below, the process of teaching children to make inferences to better understand what they read is broken down into stages. Teachers should move through the stages based on the individual needs and understanding levels of the learners in their class. Teaching children to make successively more complex inferences will happen through repeating these stages/activities over the course of several months or even the entire school year.

Depending on the learners, some students will need to spend more time in one or more stages and/or will need to go back to a previous stage to get more practice or to practice that skill at a higher level. Some students may also need extra supports, such as a vocabulary wall, sentence frames, or other support to help them to express their ideas.

Teachers should flexibly use the activities in different settings - whole class, small groups, pairs, and independently – based
on the individual needs of their students. For example, one small group might play the Inferences Triangle game together while another group works on filling out the Inferences graphic organizer and another group of students independently read and fill in the graphic organizer on their own, etc.

Likewise, for the MTB-MLE tips suggested, teachers should use them flexibly based on the needs of their learners. While some tips are listed under a specific stage or step, they can often be used in many different stages.

**MTB-MLE overarching tip**

Allow children to use the language they are most comfortable with as much as possible and especially for any activities that involve thinking/reflection. Remember that children will be more comfortable listening to/comprehending a less familiar language than speaking in it because it takes longer to develop enough proficiency to speak in a new language.

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**Stage 1: Introducing Inference Making with the Inference Triangle/Guessing Game**

**Stage 1 Summary:** Teacher uses child friendly definitions to help children understand how to make an inference and why it is important; teacher organizes a game (in different variations) to help children practice making inferences based off of a sentence or very short text.

**ён Step 1: Ensure Teacher Understanding of Inferences**

Teacher-level Definition: Making an inference is the process of combining what we know already (background knowledge) with some evidence that we find to draw a conclusion or a judgment.

For example, in our everyday experiences, we make inferences about how someone is feeling or what they are thinking based on their body language; that is, we use our prior knowledge of what certain body postures or facial expressions usually mean to make an educated guess about what the person in front of us is feeling/thinking based on the evidence we see as they make that body posture/facial expression.

When we read, we use evidence from the text (such as events, characters’ thoughts or actions, etc.) together with our background knowledge to understand or make a judgement about something that was not explicitly written in the text. For example, if the text says, “As he walked home, he threw his empty water bottle on the side of the road where it piled on top of other trash.”, we might use our background knowledge that some countries have strong anti-littering laws and some don’t, that this character likely lives in a country that either does not have or does not enforce littering laws.

It’s important to remember that there are often multiple reasonable inferences that a person can make based off of the evidence and/or their personal background knowledge:

- With the body posture/facial expression example:
  - Often when people smile, it is an indication they are happy, but sometimes people put on a fake smile when they don’t want others to know their true emotions. Readers would need to use...
additional evidence from the text to determine if the character who is smiling is likely feeling happy or if they are using a fake smile.

- Different body postures can have different meanings for different cultures. For example, in US contexts, it’s often seen as a sign of respect to look people directly in the eyes when they speak to you and especially if they are scolding you, but in South Korea, it’s often seen as a sign of disrespect if you look at an older person or person of higher status directly in the eyes when they speak to you or scold you.

- With the littering example: Without further information, there are many other possible/reasonable inferences to be made based on the text:
  - The main character is lazy because he throws his bottle on the side of the road instead of putting it in a trash can.
  - The main character feels powerless to change the littering situation that exists on the way to his home.
  - The main character lives near a trash dump.
  - Etc.

**Connection to the Asking Questions Strategy**

On some level, readers must ask themselves questions as a pre-requisite step to making an inference. Since authors do not write every single detail in their stories, there are gaps in our knowledge of what is happening in the story. As readers identify those gaps and ask questions about them, we have the opportunity to make an educated guess as to the answer, which is known as an inference. Over time and with practice, our questioning and inference making will happen so automatically that we won’t even notice we are doing them.

Common questions for making inferences include:
  - How do you think the character feels? How do you know?
  - Why did the event happen? Why do you think...?

**Types of Inferences**

Some people categorize inferences in different ways. For example, a prediction is a type of inference (Refer to the Making Predictions Section), where we use information from the text to guess what will happen (or happen next) in the story. Another type of inference uses information we read earlier in the text as our background knowledge to help us understand something that happens later in the text. And, some inferences can be made off of one piece of evidence from the text and our background knowledge while other inferences require us to put multiple pieces of evidence from the text with our background knowledge in order to come to a logical conclusion. See the diagram below for more details on other types of inferences.
Unless your curriculum says otherwise, teachers should not worry about explicitly teaching children the name or definitions of the different types of inferences. Instead, teachers can focus on helping students slowly progress towards making more complex inferences (i.e. the ones that use multiple pieces of evidence) over time, as a natural expansion of how they apply their inference making skills.

From Learning for Keeps: Teaching the Strategies Essential for Creating Independent Learners (p. 92), by R. Koenig, 2010, ASCD. Copyright 2010 by ASCD.
**Step 2: Introducing Making Inferences to Children**

1. Say:
   - Today we are going to start learning a new strategy that will help us understand what we read. This strategy is called Making Inferences.
   - When we make an inference, we make a good guess about something in the story or text.
   - The way we make this guess is by using what we know already with what the text says.

2. Choose a culturally relevant example to help explain the concept. Here’s an illustrative example:
   a. Say:
      - For example, imagine you read the following in a story: “Eduardo is watching a football match with his friends. Suddenly, they start to cheer and shout happily.”
      - What do you think happened?

   b. Solicit student responses and ask them to explain their reasoning.

   c. Say, “That’s right. The reason that Eduardo and his friend started to cheer and shout happily is because Eduardo’s team scored a goal.”

   **Note:** If children give a different response that is still reasonable, praise those reasonable responses as well, emphasizing that sometimes it is possible to make more than one reasonable inference about the same text.

**Step 3: Play the Inference Triangle Game**

1. Introduce the Inference Triangle Game (or, Inferences Guessing Game, or another name you give it.)
   a. Say, “We are going to play the Inference Triangle Game. I will read aloud several situations – just like the situation about Eduardo. Then, we are going to read the possible answers that we can choose for each situation. You will use the information in the situation to choose an inference that makes sense.

   b. Post the Inference Triangle on the board (or draw the triangle with the responses):

   ![Inference Triangle Diagram]

   **Note:** You can make a triangle with more or fewer responses each time you play the game, depending on how much time you have to play, etc.
2. Say, “This triangle includes possible answers to the situation we are going to read together. Let’s read all the possible answers together first.”

3. Point to each circle and ask the students to read aloud with you. Make sure that the students understand the information in each circle.

4. Say, “Now that we’ve read the possible answers (or inferences), let’s listen to the first situation.”

5. Read the first situation aloud: *Celia entered a big room filled with books. There were large tables all throughout where students were reading and studying. “You can borrow books from here and bring them home, too!” her sister said.*


7. Solicit responses from the students. If the students are having difficulty, read the situation a second time, using the “Think Aloud” technique. For example:
   a. *Celia entered a big room filled with books. (Teacher stops and thinks aloud, saying, “Hmmm, what kind of room is filled with books? I think it could be a school. Let’s read more to see if there are more clues.”) There were large tables all throughout where students were reading and studying. “You can borrow books from here and bring them home, too!” her sister said.* (“Oh, now I know where Celia is. There is only one place where we usually borrow books. I think it is the library!”)

8. “The answer to this situation is ‘the library’. What clues in the situation helped me to choose my answer from the triangle?”

9. Solicit responses from the students. Correct responses could be that the room was filled with books, that students were reading, and that books can be borrowed.

10. Repeat the activity with more situations, helping the students make inferences by thinking aloud and modeling, as necessary.
   a. Be sure to include some situations that could have multiple reasonable answers in the triangle.

   b. For every answer given, invite learners to explain their reasoning.

   *This will build up their vocabulary and help them to better understand how to make inferences.*
Example Situations:

<table>
<thead>
<tr>
<th>Situation</th>
<th>Question</th>
<th>Possible answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ana came rushing into the room, sweating, panting, trying to catch her breath. “I (hah-hah) ...came (hah-hah)...as fast (hah-hah)...as I (hah-hah)...could (hah-hah)... Are you (hah-hah)...okay?”</td>
<td>What was Ana doing before she came into the room?</td>
<td>Running</td>
</tr>
<tr>
<td>Mother felt Ben’s forehead. It felt warm to the touch. She took the thermometer and checked his temperature. “I don’t feel well, Mother,” Ben said. “Oh dear. Your temperature is at 39 degrees Celsius. I think we should go to the clinic.”</td>
<td>What is happening to Ben?</td>
<td>Sick with fever</td>
</tr>
<tr>
<td>Carlos was helping his mother in the kitchen. “Help me cut these up, please,” his mother requested. After a minute, Carlos had tears in his eyes and was sniffing.</td>
<td>What is Carlos doing?</td>
<td>Cutting onions</td>
</tr>
<tr>
<td>Nandhini wiped the sweat from her forehead. “I only have 4 more to go until I reach my fitness goal,” she panted.</td>
<td>What is Nandhini doing?</td>
<td>Running; Jumping Rope; Jumping Jacks;</td>
</tr>
</tbody>
</table>

11. Redo this activity multiple times throughout the school year, choosing different variations according to the needs of your students. For example:

- Variation A: Continue reading the scenarios to the whole class but have the learners discuss their inferences with partners before inviting learners to tell their answers to the class. Children can also be invited to be the ‘leader’ for the class and read out the clue(s).

- Variation B: Children play the inferences game in small groups, taking turns to be the ‘leader’ and read the clue; children can vote on which answers make the most sense based on children’s justifications and/or be given a sheet of correct answers.

- Variation C: Children write their own clues and suggested answers; then they can play the game in small groups or with the whole class, using their own clues.

MTB-MLE tips

Partner children with others who speak the same mother tongue and allow them to discuss in mother tongue.
**Stage 2:** Choosing Books for Practicing Making Inferences

**Stage 2 Summary:** Teacher chooses books that will work well for the teacher to model and children to practice making inferences from larger texts.

After children learn to make inferences with isolated text/short sentences (as in the Inference Triangle Game), they will need to learn how to apply these inference making skills to stories and texts they read.

Some texts are better than others for helping children to learn to make inferences. Please keep the following considerations in mind when you choose texts for your lessons on inferences:

1. **The Importance of Background Knowledge**
   a. Since readers need to use their background knowledge to be able to make an inference, it is essential that, at first, the stories children use for inference practice are from the cultural context that the children live in. They should be very familiar with the types of settings, events, cultural references, etc. that come in the story/text.

   b. Once children understand the basics of how to make inferences while they read, teachers can slowly have children practice making inferences using texts with less familiar contexts. In these cases, teachers should help children learn to activate their background knowledge (See Making Connections & Building Background section) before reading and/or how to find out new information from other sources to fill in the background knowledge gaps needed to make inferences with these types of texts.

2. **The Importance of Motivation (and SEL)**
   a. In order to ensure children are engaged enough to do the tough thinking required for making inferences, it’s important to choose books with ideas and events that are interesting, relevant, and generally have meaning for the learners. This means easy-reader books and/or decodable books usually are NOT the right choices for teaching making inferences, as there is often less of a story arc and/or fewer interesting ideas addressed, due to the limitations on the words used in these genres.

   b. For teachers wanting to teach social emotional learning (SEL) competencies, some books can be perfect for teaching making inferences and for teaching children about certain SEL competencies. This is especially true when we encourage children to make inferences about characters’ feelings. However, at least in some contexts, books that have too obvious of a moral or that feel ‘preachy’ will likely NOT be effective for teaching inferences, as it might dampen some children’s motivation for reading them.
Stage 3: **Modeling how to Make Inferences in an Interactive Read Aloud & with a Graphic Organizer**

Stage 3 Summary: Teacher introduces a graphic organizer to help children practice making inferences and models inference-making during an interactive read-aloud.

★ **Step 1. Introduce the Inferences Graphic Organizer**

1. Say, “Who can remind us what an inference is and how we make them?”
2. Solicit children’s responses.
3. Say, “Yes, an inference is a good guess we make about something in a story or text, by using what we know already with what the text says. When we make an inference, we are like a story detective and we combine clues in the story with information from our heads to discover things the author didn’t directly write.”
4. Say, “We are going to use a special chart called an Inferences Graphic Organizer to help us practice making inferences.
5. Draw the Inference Graphic Organizer on the board:

<table>
<thead>
<tr>
<th>Question</th>
<th>It says...</th>
<th>I say...</th>
<th>And so...</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1:</strong> Write the question</td>
<td><strong>Step 2:</strong> Find information from the text that will help answer the question.</td>
<td><strong>Step 3:</strong> Think about what you know about that information.</td>
<td><strong>Step 4:</strong> Combine what the text says with what you know to find an answer.</td>
</tr>
</tbody>
</table>

6. Say, “In the first column of the organizer, we write the question we have about the story or text.”
7. Choose one of the examples from the Inference Triangle/Guessing Game to explain how to use the graphic organizer.

Illustrative example:

a. Say, “Remember the situation we read about Cecelia in the Inference Guessing Game? That scenario said: Celia entered a big room filled with books. There were large tables all throughout where students were reading and studying. “You can borrow books from here and bring them home, too!” her sister said.

b. Say, “What question did we have after reading that situation?
Solicit learners’ responses.

c. Say, “Yes! We wanted to know where Cecelia was. So, I will write in the question column ‘Where is Cecelia?’”
<table>
<thead>
<tr>
<th>C</th>
<th>It says...</th>
<th>I say...</th>
<th>And so...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1: Write the question</td>
<td>Step 2: Find information from the text that will help answer the question.</td>
<td>Step 3: Think about what you know about that information.</td>
<td>Step 4: Combine what the text says with what you know to come up with the answer.</td>
</tr>
</tbody>
</table>

**Where is Cecelia?**

---

d. Say, “In column 2, we should write the information from the text that gives us clues to help answer our question. What clues were in the story about where Cecelia is?”

e. Solicit learners’ responses. Probe for more information until children give all the appropriate details, by asking “Any other clues about where she is?”

f. Say, “Yes, she was in a room with books, tables, and students studying and the text says ‘you can borrow books and bring them home’. So I will write those clues in my organizer.

g. Write the clues in the organizer.

<table>
<thead>
<tr>
<th>Question</th>
<th>It says...</th>
<th>I say...</th>
<th>And so...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1: Write the question</td>
<td>Step 2: Find information from the text that will help answer the question.</td>
<td>Step 3: Think about what you know about that information.</td>
<td>Step 4: Combine what the text says with what you know to come up with the answer.</td>
</tr>
<tr>
<td>Where is Cecelia?</td>
<td>- In a room with books, tables, and students studying</td>
<td>- Says ‘you can borrow books and bring them home’</td>
<td></td>
</tr>
</tbody>
</table>

h. Say, “What do we know from our own lives and other things we learned? Do we know of any place where there are books and people studying and where it’s allowed to borrow the books and bring them home?"

i. Solicit student responses, and fill in the 3rd column of the organizer.

j. Say, “So now, we can put together the information from columns 2 & 3 to make our inference: Cecelia is probably in a library!”
<table>
<thead>
<tr>
<th>Question</th>
<th>It says...</th>
<th>I say...</th>
<th>And so...</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1:</strong> Write the question</td>
<td><strong>Step 2:</strong> Text clues: Find information from the text that will help answer the question.</td>
<td><strong>Step 3:</strong> Think about what you know about that information.</td>
<td><strong>Step 4:</strong> Combine what the text says with what you know to come up with the answer.</td>
</tr>
<tr>
<td>Where is Cecelia?</td>
<td>- In a room with books, tables, and students studying - Says ‘you can borrow books and bring them home’</td>
<td>Libraries are places with books, where people study, and where you can be allowed to borrow books and take them home.</td>
<td>Cecelia is probably in a library.</td>
</tr>
</tbody>
</table>

**Step 2. Read an Interactive Read Aloud, modeling how to fill in the Inferences Graphic Organizer**

1. Using a story chosen in Stage 2, choose 3 or 4 spots in the story where it is possible to make an inference. Think through the questions to ask and how to fill in the graphic organizer for each spot.
2. Show learners the story’s cover page and read the title to them. Ask children what they think the story will be about, and have them share their predictions with a partner.
3. If there are any complex words in the story, introduce this vocabulary to children, explaining the words and meaning with illustrations, objects, etc.
4. Using the interactive read aloud technique, begin reading the story to your students.
5. At the first spot for making an inference, pause and think aloud as you fill out each column of the graphic organizer.
6. Continue reading until the 2nd spot for making an inference, and repeat step 5 for that example.
7. Continue reading until the 3rd spot for making an inference, and this time, invite the learners to help think of the question, text information, what they know, and the inference.
8. Repeat step 7 for any remaining spots for making inferences in the story.
9. Optional: After concluding the story, follow up with questions or activities based on the whole story – ex. Summarizing, etc.

**MTB-MLE tip**

Encourage learners to explain their reasoning in whatever language they are comfortable in, and encourage students to discuss their thoughts with a partner before sharing with the entire class.
Example Inferences Chart & Think Aloud Script

Using Room to Read/Pratham Storyweaver’s story: *The Birthday Present*, written by Vinaykumar Kasju, illustrated by Devendra Pandey, and translated by Alisha Berger, here are example inferences that can be made:

<table>
<thead>
<tr>
<th>Question</th>
<th>It says...</th>
<th>I say...</th>
<th>And so...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Why does Maya think she can beat everyone on the exam if she has a bicycle?</td>
<td>Pg 2: It says she can reach school faster if she has a bicycle; it says she can get there faster than rabbit.</td>
<td>Rabbits are known for being very fast. People who take a long time to get to school are sometimes late; late students miss class time and might not learn information that is on the exam.</td>
<td>Maya probably thinks having a bicycle will mean she gets to school faster than one of the fastest students (rabbit) and that she will never be late for class so she will learn all the information she needs for the exam.</td>
</tr>
<tr>
<td>How does Maya feel when others call her “Tiny Turtle Late-Late”?</td>
<td>Pg 5: It says ‘Nobody likes being called names. Maya didn’t like it either.’</td>
<td>When people call me names that I don’t like, I feel frustrated, mad, and sad.</td>
<td>May probably feels angry or frustrated when others call her Tiny Turtle Late-Late.</td>
</tr>
<tr>
<td>How is Maya feeling when she arrives to class?</td>
<td>Pg 7: It says the class called her by the name she didn’t like and that her teacher looked angry. But she is smiling in the picture.</td>
<td>I feel frustrated when people use a name I don’t like and I feel scared when my teachers look angry.</td>
<td>Maya is probably feeling more than one emotion – probably frustration and fear. Maybe she is having a nervous smile in the picture.</td>
</tr>
<tr>
<td>Why does Maya ask the teacher to not talk to the principal?</td>
<td>Pg 11: It says that Maya said her mother promised to buy her a bicycle so she will not be late anymore.</td>
<td>I get scared if my teacher tells me we have to talk to the principal about a problem, because usually only big problems go to the principal and I don’t want to get in trouble.</td>
<td>Maya probably is scared to talk to the principal and she thinks there is no need anyway if a new bicycle allows her to arrive at school on time.</td>
</tr>
<tr>
<td>Do any of Maya’s classmates know where to buy a bicycle for a tortoise?</td>
<td>Pg 14: It says, “Even her teacher did not know where to get a bicycle for a tortoise!”</td>
<td>I know that teachers usually know more than students, and also that “even” can sometimes mean “also”; the “also” might be referring to Maya’s classmates.</td>
<td>The classmates do not know where to buy a bicycle for a tortoise.</td>
</tr>
</tbody>
</table>
Example think aloud script for this story – inference example #1:

1. After reading the first page, say, “I wonder why Maya thinks she can beat everyone on the exam if she has a bicycle? What does a bicycle have to do with passing an exam? I will write this question in the question column.
2. Say, “What does the story say? It says, ‘she can reach school faster if she has a bicycle. It even says she can get there faster than rabbit.’ I will write that in the 2nd column.”
3. Say, “Now what do I know about these things? Well, I know rabbits are usually very fast. I will write that in column 3.
4. Say, “I also know that students who take a long time to get to school are sometimes late; and late students miss class time and might not learn information that is on the exam. I will write that in the third column too.”
5. Say, “So if I put this information together, can I answer my question? Why does Maya think she’ll beat everyone on the exam if she has a bicycle? She probably thinks that having a bicycle means she’ll arrive quickly to school, even quicker than rabbit who is one of the fastest students to arrive. Then she will never be late for class so she will learn all the information she needs for the exam and be able to beat the others!”

Stage 4: Children’s practice with the Making Inferences Graphic Organizer

Stage 4 Summary: Children use the graphic organizer to practice making inferences as they read.

After doing several interactive Read Alouds, with modeling and guided practice for how to fill out the Making Inferences Graphic Organizer, with the whole class, then invite children to fill out the graphic organizer in small groups. The teacher can read aloud a new story, and pause along the way for children to make their inferences and fill in the graphic organizer, OR, the children can read the story on their own in small groups and choose when to stop and make inferences and fill out the graphic organizer. After children have had practice using the organizer in groups, they can be asked to do a similar exercise with a new text in pairs and eventually on their own.

Teachers can use the graphic organizers to formatively assess which students understand how to make inferences and which students need more support/practice.

MTB-MLE tips

Teachers can do their “think aloud” in different languages. Similarly, depending on the objectives of the lesson, the teacher could read a story in one language and write the inference chart in another, etc.

• Choose texts in different languages so that children understand they can make inferences in any language. You may want to provide books in different languages that children can choose from. Allowing them to choose will increase their motivation.

• Vary the language children are expected to write/speak their responses in – for example if the story is in English, allow them to write their answers in their Mother Tongue, etc.

• Encourage children to discuss in their groups/with partners in the language they feel most comfortable in.

• Remember to teach children to activate their background knowledge for any stories that may take place in unfamiliar contexts.
**Stage 5: Children are able to make inferences and/or write stories where readers have to make inferences without the use of a graphic organizer**

**Stage 5 Summary:** Children practice making inferences while reading without using the graphic organizer and write stories that invite readers to make inferences.

Once children have shown that they can accurately and consistently fill out the Making Inferences Graphic Organizer with reasonable inferences for new stories/texts, they may be ready to make inferences without the need for the graphic organizer. If children can easily explain their inferences orally (whether in Mother Tongue or another language of instruction), they may no longer need to be required to fill in the graphic organizer.

If teachers force children to fill in the graphic organizer when they no longer need it, it may demotivate some learners. To avoid this, encourage learners who have already mastered the Making Inferences strategy to do one of the following:

- Practice the Making Inferences Strategy with more difficult texts/stories
- Write their own stories and identify places where readers will need to make an inference
- Partner with a learner who has not yet mastered this comprehension strategy to support that child’s learning.
Deeper Dive: Visualizing

Sketch to stretch (Short et al., 1996)

Sketch to stretch is an instructional strategy that helps students comprehend texts they are listening to or reading. This strategy ensures readers pay attention to the details in a text. Drawing what they read or listen to helps students to “stretch” or deepen their understanding and interpretation of ideas and concepts.

Why is it important?
Using this strategy helps children understand main ideas, remember details, and move from being passive readers to active readers and listeners. As a formative assessment, the sketch to stretch strategy helps teachers determine learners’ knowledge of main ideas, important events and ability to summarize the text.

How is it taught?
Teach learners to listen or read for details which create a mental picture for them. These are the steps:

1. Ask learners to listen or read the text, drawing as they go.
   a. Or, ask learners to draw after they listen to or read the text.

2. Ask learners to share their drawings, pointing out the source of their information in the text (either heard or read).

Sketch to stretch can also be used to: (1) draw story elements such as characters, themes, setting, and plot, (2) illustrate a series of events, (3) make connections, (4) summarize understanding of a text, and (4) label and/or write captions.

MTB-MLE Tips for Sketch to Stretch

1. Make sure any new vocabulary words have been introduced (and written on the chalkboard) before the passage is read, in either language.

2. Learners use word banks or teachers use a diglot (T-chart) vocabulary list to record new vocabulary.

3. The teacher reads the text in the LoTL and students draw.

4. Teacher reads the text in the LoTL and children label, caption and/or write sentences in the L1 or L2.

5. Teacher reads the text in the LoTL, children draw and describe their sketches in the L1 or L2 in small groups or with the whole class.

6. In groups, children look at similarities and differences among their drawings using the LoTL or any other language.
The Reading Comprehension Interest Group