HELPFUL HINTS FOR TEACHING THE HABITS OF MIND

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www.instituteforhabitsofmind.com
MINDful ReMINDers

Do you ever suffer from information overload? Sometimes it is difficult to keep our attention on what is most important as we get lost in the details of covering our curriculum. These MINDful ReMINDers are “memory joggers” intended to keep in the forefront of your mind the Habits of Mind*—those essential attitudes and dispositions that focus on the importance of communication, coaching and teaching for more skillful thinking.

In this downloadable packet, there are ReMINDers about some of the skills, strategies and vocabulary for planning lessons and for teaching the Habits of Mind: Questioning strategies, listening with understanding and empathy, metacognition, and assessing student growth.

MINDful ReMINDers are intended to be kept close at hand—such as on your desktop, bulletin board, or any other places where you can visibly reference them as you plan, teach, and reflect on student learning. You may wish to laminate them, collect them into a folder or organize them in a way what would be helpful to you. Once you have downloaded this set, please feel free to share it with others on your staff. Conduct a dialogue with others as to how you found the ReMINDers useful, what effects they have on your students and how might you might create some of your own.

Go to the website www.instituteforhabitsofmind.com and add your ideas to the resources. Join us in our journey for continuous learning!

Art Costa and Bena Kallick

*The Habits of Mind are described and illuminated in the following books, all of which are available from the Association for Supervision and Curriculum Development, Alexandria Virginia (www.ascd.org):

**Self Coaching:**
Planning a Unit or Lesson with Habits of Mind in Mind

<table>
<thead>
<tr>
<th>COACHING QUESTIONS I ASK MYSELF</th>
<th>NOTES TO MYSELF</th>
</tr>
</thead>
<tbody>
<tr>
<td>As I anticipate this lesson (unit), what are some of my purposes, (essential questions) (outcomes)?</td>
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<tr>
<td>What activities will I use to engage students in learning?</td>
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<tr>
<td>On which Habits of Mind will I focus to encourage and motivate better thinking</td>
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<tr>
<td>How did I decide to focus on those particular Habits of Mind?</td>
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<tr>
<td>What will I (be alert to) (pay attention to) (be aware of) in students' behavior as indicators of learning/Habits of Mind</td>
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<tr>
<td>What specific questions and/or metacognitive strategies might I use to engage student thinking and Habits of Mind?</td>
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<tr>
<td>As I envision teaching the lesson, which Habits of Mind might I need to be aware of in my own behavior?</td>
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# Self Coaching:
Reflecting on a Unit or Lesson with Habits of Mind in Mind

<table>
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<tr>
<th>COACHING QUESTIONS I ASK MYSELF</th>
<th>NOTES TO MYSELF</th>
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</thead>
<tbody>
<tr>
<td>As I reflect on this (lesson) (unit) how do I think it went?</td>
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<tr>
<td>What did I (see) (hear) students (doing) (saying) (acting) that made me feel that way?</td>
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<tr>
<td>As I reflect on my desired outcomes, what were some indicators that students achieved them?</td>
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<tr>
<td>What did I do to make this happen? What were some of my strategies that contributed to the lesson's outcomes?</td>
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<tr>
<td>What were some indicators that students were (aware of) (performing) (using) (applying) (valuing) the Habits of Mind?</td>
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</tr>
<tr>
<td>As I anticipate future units or lessons, on which Habits of Mind might I focus?</td>
<td></td>
</tr>
<tr>
<td>What insights and new learnings might I carry forward to future learning activities?</td>
<td></td>
</tr>
<tr>
<td>As I reflect on this lesson analysis, what new learnings have I gained about me? About the Habits of Mind?</td>
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</table>
They should show progress over time along 5 dimensions:

1. *Greater meaning.* Are my students:
   - expanding their meaning of the Habits of Mind
   - familiar with and employing the vocabulary that describes the habit?

2. *Increased skillfulness, strategies and capacities.* Are my students:
   - familiar with and employing a greater range of skills and strategies that help them to use the habit successfully?

3. *Wider applications in more and different situations.* Are my students:
   - able to find examples of when the habit should or should not be used?

4. *Greater value.* Are my students:
   - helping others notice when it is important to use the habit?
   - celebrating their success as a result of using the habits?

5. *More commitment to self-improvement.* Are my students:
   - evaluating their own performance and setting goals for themselves so that the behavior becomes a habit?

Sample questions to ask students so that they become more self-assessing:

- What did you observe about yourself as you were working on the project?
- What strategies might you use to help you manage your impulsivity?
- If you were to do another project like this, which of the habits might you use to improve your work process?
- What are some of the benefits of employing this habit of mind?
- What goals are you setting for yourself as you anticipate your next project? How well do you feel you are accomplishing this goal?
Posing Questions to Engage Three Levels of Thinking

**OUTPUT**
The third story of the house invites students to go beyond the skylights to apply concepts in new and hypothetical situations:
- Evaluate
- Generalize
- Imagine
- Judge
- Predict
- Speculate
- Hypothesize
- Forecast
- Idealize
- If/Then
- Apply a principle

**PROCESSING**
On the second story are cognitive operations that help students make meaning of the data:
- Compare
- Distinguish
- Analyze
- Contrast
- Explain (why)
- Synthesize
- Classify
- Infer
- Make
- analogies
- Sort
- Sequence
- Reason

**INPUT**
On the first story are the data-gathering cognitive operations:
- Complete
- Identify
- Observe
- Count
- List
- Recite
- Define
- Match
- Select
- Describe
- Name
- Scan

Since all levels of thinking are important, you will want to design and pose questions that elicit all three levels of intellect.
Think Aloud Problem Solving

Teacher Responses that Engage and Sustain METACOGNITION:

1. POSE QUESTIONS THAT CAUSE THE STUDENT TO CHECK FOR ACCURACY.
   - "How do you know you are right?"
   - "What other ways can you prove that you are correct?"
   - "What might be some other ways to approach this problem?"

2. PAUSE AND CLARIFY BUT DON’T INTERRUPT
   - "Explain what you mean when you said you 'just figured it out'".
   - "When you said you started at the beginning, how did you know where to begin?"

3. PROVIDE DATA, NOT ANSWERS
   - "I think you heard it wrong; let me repeat the question.................."
   - "You need to check your addition."

4. RESIST MAKING VALUE JUDGMENTS OR AGREEING WITH STUDENTS’ ANSWERS.
   - "So, your answer is 48. Who came up with a different answer?"
   - "That’s one possibility. Who solved it another way?"

5. STAY FOCUSED ON THINKING PROCESSES
   - "Tell us what strategies you used to solve the problem"
   - "What steps did you take in your solution?"
   - "What was going on inside your head as you solved the problem?"

6. ENCOURAGE PERSISTENCE
   - "C’mon, you can do it” Try it again!"

Pose challenging problems then invite students to:

- Describe their plans and strategies for solving the problem.
- Share their thinking as they are implementing their plan.
- Reflect on/evaluate the effectiveness of their strategy.

THINKING ALOUD......ALLOWED!
Enhancing Self-Directed Learning
A 21st century learner must be able to become self-governing.
The Habits of Mind, encourage students to become more effective as self-directed learners.

The Self-Directed Learner Is:

**Self-Managing**
Knowing the significance of and being inclined to approach tasks with clarity of outcomes, a strategic plan, and necessary data, drawing from past experiences, anticipating success indicators, and creating alternatives for accomplishment.

**Self-Monitoring**
Having sufficient self-knowledge about what works, establishing conscious metacognitive strategies to alert the perceptions for in-the-moment indicators of whether the strategic plan is working or not and to assist in the decision-making processes of altering the plan and choosing the right actions and strategies.

**Self-Modifying**
Reflecting on, evaluating, analyzing, and constructing meaning from experience and making a commitment to apply the learning to future activities, tasks, and challenges.

Habits of Mind that Encourage Self-Directedness

- Managing Impulsivity
- Thinking flexibly
- Questioning and problem posing
- Applying past knowledge
- Gathering data
- Imagining, innovating and creating

- Thinking about your thinking (metacognition)
- Persisting
- Striving for accuracy and precision
- Listening with understanding and empathy

- Thinking and communicating with clarity and precision
- Responding with wonderment and awe
- Remaining open to continuous learning
- Thinking interdependently

Assessment Tools and Strategies

- Operationally Defining
- "Y" charts (Looks like/ Sounds like/Feels like)
- How am I doing Checklists
- Journals, Diaries and Logs
- Rubrics
- Portfolios
- "I Can" statements
- Self-assessment Inventories
**Invitational Stems**

<table>
<thead>
<tr>
<th>As you...</th>
<th>What are some of...</th>
<th>How might you...</th>
<th>What led to...</th>
<th>What possible...</th>
<th>What alternative might...</th>
<th>What hunches do you have about...</th>
<th>How should...</th>
</tr>
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</table>

**Cognitive Operations**

<table>
<thead>
<tr>
<th>Input:</th>
<th>Process:</th>
<th>Output:</th>
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<tbody>
<tr>
<td>□ Recall</td>
<td>□ Compare</td>
<td>□ Predict</td>
</tr>
<tr>
<td>□ Define</td>
<td>□ Contrast</td>
<td>□ Evaluate</td>
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<tr>
<td>□ Describe</td>
<td>□ Infer</td>
<td>□ Speculate</td>
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<tr>
<th>Identify</th>
<th>Seqence</th>
<th>Imagine</th>
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<tbody>
<tr>
<td>Name</td>
<td>Synthesize</td>
<td>Envision</td>
</tr>
<tr>
<td>List</td>
<td>Summarize</td>
<td>Hypothesize</td>
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**Content**

<table>
<thead>
<tr>
<th>Internal:</th>
<th>External:</th>
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<tbody>
<tr>
<td>Reactions</td>
<td>Projects</td>
</tr>
<tr>
<td>Feelings</td>
<td>Other Students</td>
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<tr>
<td>Thoughts</td>
<td>Groups</td>
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<tr>
<td>Emotions</td>
<td>Events</td>
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<td></td>
<td>Goals</td>
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<td>Lessons</td>
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**Attributes of Powerful Questions:**

- An approachable voice
- Exploratory, tentative language
- Positive presuppositions
- Plural forms
- Invitational Stems
- Complex levels of thought

**For Example:**

- Drawing upon what you have learned (Invitational Stem)
- How might you apply these insights in the other courses you're taking? (Positive Presupposition)
**Some Questions to Avoid**

Not only must we become conscious of the powerful, intentional questions that we ask, we also need become more aware of those questions that may hinder the student’s thinking. We want to accentuate the former and eliminate the latter.

<table>
<thead>
<tr>
<th>Category</th>
<th>Why to Avoid</th>
<th>Examples</th>
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<tbody>
<tr>
<td>Verification questions</td>
<td>The answers are already known to you or to the student</td>
<td>“What is the name of.....?” “How many times did you ..?” “On what day did you......?”</td>
</tr>
<tr>
<td>Closed questions</td>
<td>Can be answered “yes,” “no,” or “I can.”</td>
<td>“Can you recite the poem?” “Can you tell us the name of.....?” “Who can remember the formula for.....?”</td>
</tr>
<tr>
<td>Defensive questions</td>
<td>Cause justification, resistance and self-protection:</td>
<td>“Why didn’t you complete your homework?” “Why would you do a thing like that?” “Are you misbehaving again?”</td>
</tr>
<tr>
<td>Agreement questions</td>
<td>Seek agreement with your opinion or answer</td>
<td>“This is really the best solution, isn’t it?” “Let’s do it my way, O. K.?” “We really should get started now shouldn’t we?” “So how much is 3 x 4: twelve. OK?” “Who can name the three basic parts of a plant? Root, stems and leaves, right?”</td>
</tr>
<tr>
<td>Rhetorical questions</td>
<td>The answer is given within the question:</td>
<td>“In what year was the War of 1812?” “Since when has Mikhail Gorbachev had his birth mark?”</td>
</tr>
</tbody>
</table>
Skillful Listening with Understanding and Empathy:
The Three “P’s” of Good Listening

**PAUSING**
(Wait time) (Silence)
Giving students opportunities to think more deeply and to manage their impulsivity

I. After having asked a question.
II. After the student answers the question.
III. After the student asks a question.

**PARAPHRASING**
Letting students know that you understand them or that you are trying to understand them and that you value their ideas and thoughts (E.g. “You’re suggesting that…….” “Your idea is…….” “You’re upset because…….”)

Accurately interpreting or summarizing what you hear the student saying. Use “You”, not “I” statements. Capturing the emotion and content ("You’re upset because you lost your notes and you want to do well on this project.")

**PROBING**
(E.g. “Tell us more about your plans to….”)

Inquiring
Showing students that their ideas are worthy of exploration and consideration (E.g. “How did you decide to..?"

Clarifying
Demonstrating your desire to understand more fully. (E.g. “Which teachers specifically….?” “When you say you ‘just got started,’ how did you know where to begin?”)

Showing that you are interested in, value, and want to pursue students’ thinking more deeply.

Demonstrating your interest in the student’s idea by posing further questions, gathering data, seeking rationale, etc.

Inviting the student to become more specific when he/she uses a vague or unfamiliar term or to explain and/or elaborate on an idea. Assisting learners to think and communicate with clarity and precision.
The Reflective Staircase

Making a commitment to get better
Intentionally taking charge of my own thinking in future situations

Applying my thinking to predict ahead times and situations when this type of strategy would be useful.

Evaluating how well my strategy is working
Monitoring the effectiveness of the strategy before, during and

Thinking strategically: knowing the strategy that I am going to use/ are using / have used as I do /

Becoming aware of my using habits of mind: naming habits of mind I am going to do/ am doing / have done.
Habits Of Mind

<table>
<thead>
<tr>
<th>Habit</th>
<th>Description</th>
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<tbody>
<tr>
<td>1. Persisting:</td>
<td><em>Stick to it!</em> Persevering in task through to completion; remaining focused. Looking for ways to reach your goal when stuck. Not giving up.</td>
</tr>
<tr>
<td>2. Managing impulsivity:</td>
<td><em>Take your Time!</em> Thinking before acting; remaining calm, thoughtful and deliberative.</td>
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<tr>
<td>3. Listening with understanding and empathy:</td>
<td><em>Understand Others!</em> Devoting mental energy to another person’s thoughts and ideas; Make an effort to perceive another’s point of view and emotions</td>
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<tr>
<td>4. Thinking flexibly:</td>
<td><em>Look at it Another Way!</em> Being able to change perspectives, generate alternatives, consider options.</td>
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<tr>
<td>5. Thinking about your thinking (Metacognition):</td>
<td><em>Know your knowing!</em> Being aware of your own thoughts, strategies, feelings and actions and their effects on others.</td>
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<tr>
<td>7. Questioning and problem posing:</td>
<td><em>How do you know?</em> Having a questioning attitude; knowing what data are needed and developing questioning strategies to produce those data. Finding problems to solve.</td>
</tr>
<tr>
<td>8. Applying past knowledge to new situations:</td>
<td><em>Use what you Learn!</em> Accessing prior knowledge; transferring knowledge beyond the situation in which it was learned.</td>
</tr>
<tr>
<td>9. Thinking and communicating with clarity and precision:</td>
<td><em>Be clear!</em> Striving for accurate communication in both written and oral form; avoiding over generalizations, distortions, deletions and exaggerations.</td>
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<tr>
<td>10. Gather data through all senses:</td>
<td><em>Use your natural pathways!</em> Pay attention to the world around you Gather data through all the senses. taste, touch, smell, hearing and sight.</td>
</tr>
<tr>
<td>12. Responding with wonderment and awe:</td>
<td><em>Have fun figuring it out!</em> Finding the world awesome, mysterious and being intrigued with phenomena and beauty.</td>
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<tr>
<td>13. Taking responsible risks:</td>
<td><em>Venture out!</em> Being adventuresome; living on the edge of one’s competence. Try new things constantly.</td>
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<tr>
<td>15. Thinking interdependently:</td>
<td><em>Work together!</em> Being able to work in and learn from others in reciprocal situations. Team work.</td>
</tr>
<tr>
<td>16. Remaining open to continuous learning:</td>
<td><em>Learn from experiences!</em> Having humility and pride when admitting we don’t know; resisting complacency.</td>
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