

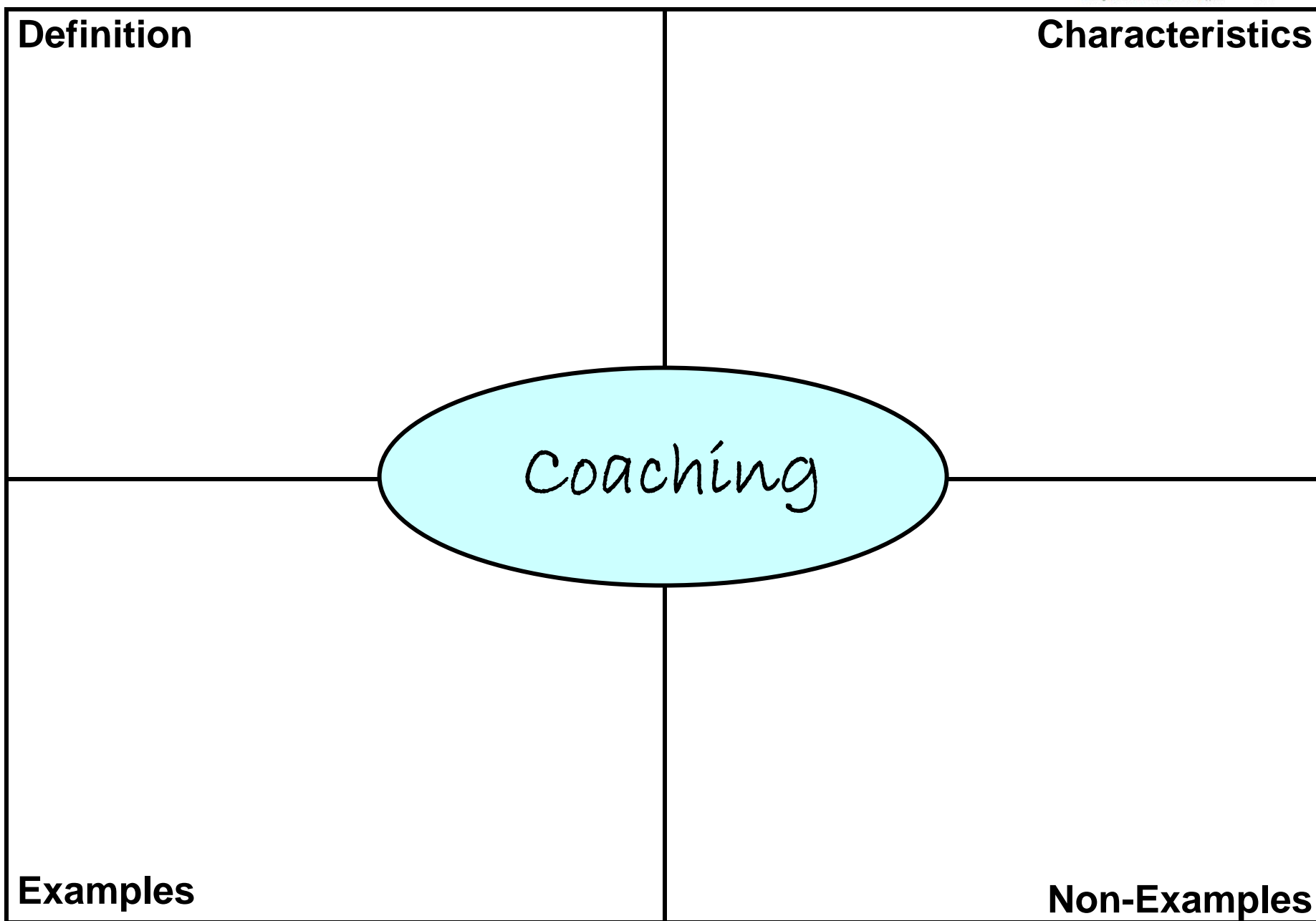


# Developing Coaching Practices for Math GAINS

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## Coaching Strategies / Coaching Question Stems

Strategy Purpose	Explanation	Question Stems
Paraphrasing / Active Listening <ul style="list-style-type: none"> <li>Initial meeting</li> <li>During sharing &amp; discussions at any time</li> </ul>	To demonstrate listening build rapport and trust. Body language is important as well.	Do I understand that... In other words... It sounds like... Umm humm...
Clarifying <ul style="list-style-type: none"> <li>Goal setting</li> <li>Gathering data</li> </ul>	Questions of fact that have brief, factual answers. They clarify so that the coach can move to probing questions from which to provide feedback. If the coachee must think before answering, it's probably a probing question.	Can you provide an example of... Is it always the case that... How is... same as, different from... What do you mean by... How might you reframe .... as a goal?
Interpreting <ul style="list-style-type: none"> <li>Co planning</li> <li>Goal setting</li> <li>Interpreting data</li> </ul>	Similar to paraphrasing, but with a bit of interpretation to clarify.	What you are explaining might mean... Could it mean that... could happen? Is it possible that the following things could result from.... Might one of your goals be....
Probing <ul style="list-style-type: none"> <li>Co planning</li> <li>Debriefing (adaptation may be required)</li> <li>Discussing next steps</li> </ul> <p>Note: Consider the concentric circles of comfort, risk and danger. Some risk is reasonable, be cautious of pushing the coachee into the "danger zone."</p> <p>Avoid questions that illicit yes/no responses</p>	Intended to help the coachee think deeper about the focus of the matter being discussed. Often this is in the co-planning stage. The coachee often doesn't have an immediate answer (slow response is expected).  Be flexible and ready to respond to multiple responses  helps create a paradigm shift  empower the coachee to resolve his or her own dilemma/problem move thinking from reaction to reflection  Evokes teacher thinking.  Exposes teacher thinking.  Helps teacher see and drill into "good pedagogical	What is the big idea/goal/concept/skills intended in this lesson?  In what way is this linked to the curriculum expectations?  How does this lesson connect to previous understandings/lessons and future ones?  What are some student misconceptions about this concept/idea?  What action might the students engage in, and how will these be introduced? What would be some questions (open, parallel) that would help students explore the problem?  What tools might be available to help students understand this concept/goal?  In what ways can you engage all learners in your classroom? (those who are struggling? those who quickly consolidate the understanding?)  What might happen if... In what way(s) would... impact your students (class)?

## Coaching Strategies / Coaching Question Stems

Strategy Purpose	Explanation	Question Stems
	<p>practice”.</p> <p>Suggested reading “Content Coaching Transforming the Teaching Profession” by Lucy West</p>	<p>How could you ensure that....</p> <p>Why....</p> <p>Describe how .... might be related to your goal?</p> <p>What might you.... assume? get as a response? expect from your students? Followed by: Why do you think this is the case?</p> <p>What strategies could you put into place in order for...?</p> <p>What’s another way you might... try that, look at this, introduce that....?</p> <p>What would it look like if...?</p> <p>What do you think would happen if...? How was...different from...?</p> <p>How do you think...would impact ....</p> <p>What data do you have that would support....</p> <p>How did you handle this in the past, and how successful was that action?</p> <p>What did you anticipate would happen when ....</p> <p>Why is ... approach the best way to...</p> <p>How do you think your own... (e.g., learning style, experience) has effected your choice of pedagogical approach?</p> <p>What do/would the students think/say if... and why do you think this?</p> <p>Are there other staff who would be interested in involving themselves with this.... (issue, plan, unit, assessment)</p> <p>What is the “big idea” of this lesson? How can</p>

## Coaching Strategies / Coaching Question Stems

Strategy Purpose	Explanation	Question Stems
		<p>you assess if students have “gotten it”?</p> <p>Why does having students ...cause you discomfort?</p> <p>What other strategies have you considered?</p> <p>How much control do you have over the situation?</p> <p>At your best, what qualities, attributes, competences, do you bring to this situation?</p>
<p>Instructing</p> <ul style="list-style-type: none"> <li>• Co planning</li> <li>• Debriefing</li> <li>• Discussing next steps</li> </ul> <p>Note: coach would ask permission before doing instructional coaching</p>	<p>Intended when the coachee would benefit from learning about a topic/ pedagogical method, professional practice etc. The coach provides feedback, offers personal experiences and suggestions as needed. It can take the form of advice, modeling, direct instruction, referencing/provision of resources etc.</p>	<p>Can I provide more information on...</p> <p>Is there any aspect of your plan that I can help with?</p> <p>Would you like me to provide a list of...</p> <p>If you have not seen/heard .... Would it be helpful for me to ... (summarize/ provide) this resource for you?</p> <p>Research seems to show that...</p> <p>Some teachers find it helpful to...</p> <p>Would you like me to put you in touch with _____ who has had some experience with this?</p> <p>Are you aware of .... (this resource) that can be found....</p>
<p>Summarizing</p> <p>After each meeting:</p> <ul style="list-style-type: none"> <li>• Initial conversation</li> <li>• Goal setting</li> <li>• Co planning</li> <li>• Debriefing</li> <li>• Discussing next steps</li> </ul>	<p>All sessions with coachee should conclude with some form of summary or consolidation. It can be verbal but is often helpful if it is written. It can then be shared and referred to.</p>	<p>The goal* of today’s meeting was.... and we completed....</p> <p>The key points of our discussion are...</p> <p>Our next meeting will be.... and the goal* of that meeting will be....</p> <p>For next meeting I will.... And you will ....</p> <p>Describe your next step...</p> <p>*goals are mutually determined and agreed upon between coach and coachee</p>
<p>Transforming</p>		<p>Would you like to role play ....?</p> <p>What data could you find that confirms...?</p> <p>How can you look at that as a positive?</p>
<p>Each coaching strategy/ question type is not unique, indeed one often blends into another. Furthermore, these are not necessarily a linear progression. As the coaching cycle is indeed cyclical, so are the coaching strategies and questioning. Paraphrasing/clarifying/probing questions will be ongoing. Instructional will depend on the needs of the coachee, summarizing will occur during each meeting, likely towards the end.</p> <p style="text-align: center;">* adapted from: “Content Coaching Transforming the Teaching Profession” by Lucy West</p>		

### Coaching Strategies / Coaching Question Stems/ Quick Guide

Question type	Description	Sample Questions and Question Stems
<b>Paraphrasing</b> <ul style="list-style-type: none"> <li>Initial meeting</li> <li>During sharing &amp; discussions</li> </ul>	To demonstrate listening build rapport and trust. Body language is important as well.	<ul style="list-style-type: none"> <li>Do I understand that...</li> <li>In other words...</li> <li>It sounds like...</li> <li>Umm humm...</li> </ul>
<b>Clarifying</b> <ul style="list-style-type: none"> <li>Goal setting</li> <li>Gathering data</li> </ul>	Questions of fact that have brief, factual answers.	<ul style="list-style-type: none"> <li>Can you provide an example of...</li> <li>Is it always the case that...</li> <li>What do you mean by...</li> <li>How might you reframe .... ?</li> </ul>
<b>Interpreting</b> <ul style="list-style-type: none"> <li>Co planning</li> <li>Goal setting</li> <li>Interpreting data</li> </ul>	Similar to paraphrasing, but with a bit of interpretation to clarify.	<ul style="list-style-type: none"> <li>Could it mean that... could happen?</li> <li>Is it possible that ...</li> <li>Is another way to look at this...</li> </ul>
<b>Probing</b> <ul style="list-style-type: none"> <li>Co planning</li> <li>Debriefing (adaptation may be required)</li> <li>Discussing next steps</li> </ul>	<p>intended to help the coachee think deeper</p> <p>helps create a paradigm shift</p> <p>empowers the coachee to improve teaching and learning without the coach</p> <p>Evokes teacher thinking.</p> <p>Exposes teacher thinking.</p> <p>Helps teacher see and drill into "good pedagogical practice".</p>	<ul style="list-style-type: none"> <li>What is the big idea/goal/concept/skills intended in this lesson?</li> <li>How does this lesson connect to previous understandings/lessons and future ones?</li> <li>What are some student misconceptions about this concept/idea?</li> <li>What action might the students engage in? What would be some questions (open, parallel) that would help students explore the problem?</li> <li>What tools might be available to help students understand this concept/goal?</li> <li>In what ways can you engage all learners in your classroom? (those who are struggling? those who quickly consolidate the understanding?)</li> <li>What might happen if...</li> <li>What data do you have that would support....</li> <li>How did you handle this in the past, and how successful was that action?</li> </ul>
<b>Instructing</b> <ul style="list-style-type: none"> <li>Co planning</li> <li>Debriefing</li> <li>Discussing next steps</li> </ul> <p>Note: coach would ask permission</p>	Coachee would benefit from learning about a topic/ pedagogical method. Can be advice, modeling, direct instruction, referencing /provision of resources	<ul style="list-style-type: none"> <li>Can I provide more information on...</li> <li>Would you like me to provide a list of...</li> <li>If you have not seen/heard ....would you like me...</li> <li>Would it be helpful for me to ...</li> <li>Research seems to show that...</li> <li>Some teachers find it helpful to...</li> <li>Are you aware of ....(this resource) that can be found....</li> </ul>
<b>Summarizing</b> At the conclusion of any meeting	Concluding / consolidating the meeting	<ul style="list-style-type: none"> <li>The goal of today's meeting was.... and we completed....</li> <li>The key points of our discussion are...</li> <li>For next meeting I will.... and you will ....</li> <li>Describe your next step...</li> </ul>

# Coaching Practices and Question Stems

<p><b>Paraphrasing</b></p> <ul style="list-style-type: none"> <li>• Do I understand that...</li> <li>• In other words...</li> <li>• It sounds like...</li> </ul> <p><b>Clarifying</b></p> <ul style="list-style-type: none"> <li>• What do you mean by...</li> <li>• Is it always the case that...</li> <li>• How is... same as/different from...</li> </ul> <p><b>Interpreting</b></p> <ul style="list-style-type: none"> <li>• What you are explaining might mean...</li> <li>• Could it mean that...</li> <li>• Is it possible that ... could result from...</li> </ul> <p><b>Probing</b></p> <p><b>Be aware that:</b></p> <ul style="list-style-type: none"> <li>▪ The coachee often won't have an immediate answer – wait time!</li> <li>▪ Coachee will be prompted to think more deeply about the focus of the matter of the discussion.</li> </ul> <p><b>Rationale:</b></p> <ul style="list-style-type: none"> <li>▪ These help create a paradigm shift.</li> <li>▪ These assist and empower the coachee to develop professional habits of mind.</li> <li>▪ These prompt thinking to change from reactive to reflective.</li> </ul>	<p><b>Probing (cont'd)</b> [These questions might be asked in the co-planning stage.]</p> <ul style="list-style-type: none"> <li>• What is the big idea/goal/concept in this lesson?</li> <li>• How does this lesson connect to ....</li> <li>• What are some student misconceptions ...</li> <li>• What action might ...</li> <li>• How will... be introduced?</li> <li>• How will this action help them with ...</li> <li>• How will you know when the students ...</li> </ul> <p>[These variations might be asked in the debrief stage.]</p> <ul style="list-style-type: none"> <li>• What would be some questions (open, parallel) ...</li> <li>• What aspects of the lesson ...</li> <li>• At what point in the lesson ...</li> <li>• What might have happened if....</li> <li>• In what way(s) would...</li> <li>• How could you ensure that....</li> <li>• What's another way you might...</li> <li>• What would it have looked like if....</li> <li>• How do you know if the students...</li> </ul> <p><b>Instructing</b></p> <ul style="list-style-type: none"> <li>• Can I provide more information on...</li> <li>• Would you like me to provide a list of...</li> <li>• If you have not seen ....., would you like me to...</li> <li>• Research seems to show that...</li> <li>• Some teachers find t helpful to...</li> </ul>
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<b>LNS Video Co-Planning Viewing Guide</b>	
<p>Describe how the coach or others guided the discussion.</p>	
<p>How did the coach expose and evoke teacher understanding of the big math ideas and the essential teaching strategies in the lesson?</p>	
<p>Did the coach provoke the teachers to think about issues they hadn't previously considered?</p>	

**Other Notes:**

<b>LNS Video Debrief Observation Guide</b>	
Describe how the coach guided the discussion.	
How did the coach expose and evoke the teacher's understanding of what went on in the lesson?	
What kinds of questioning strategies did the coach employ? How effective were they?	

**Other Notes and Suggestions:**

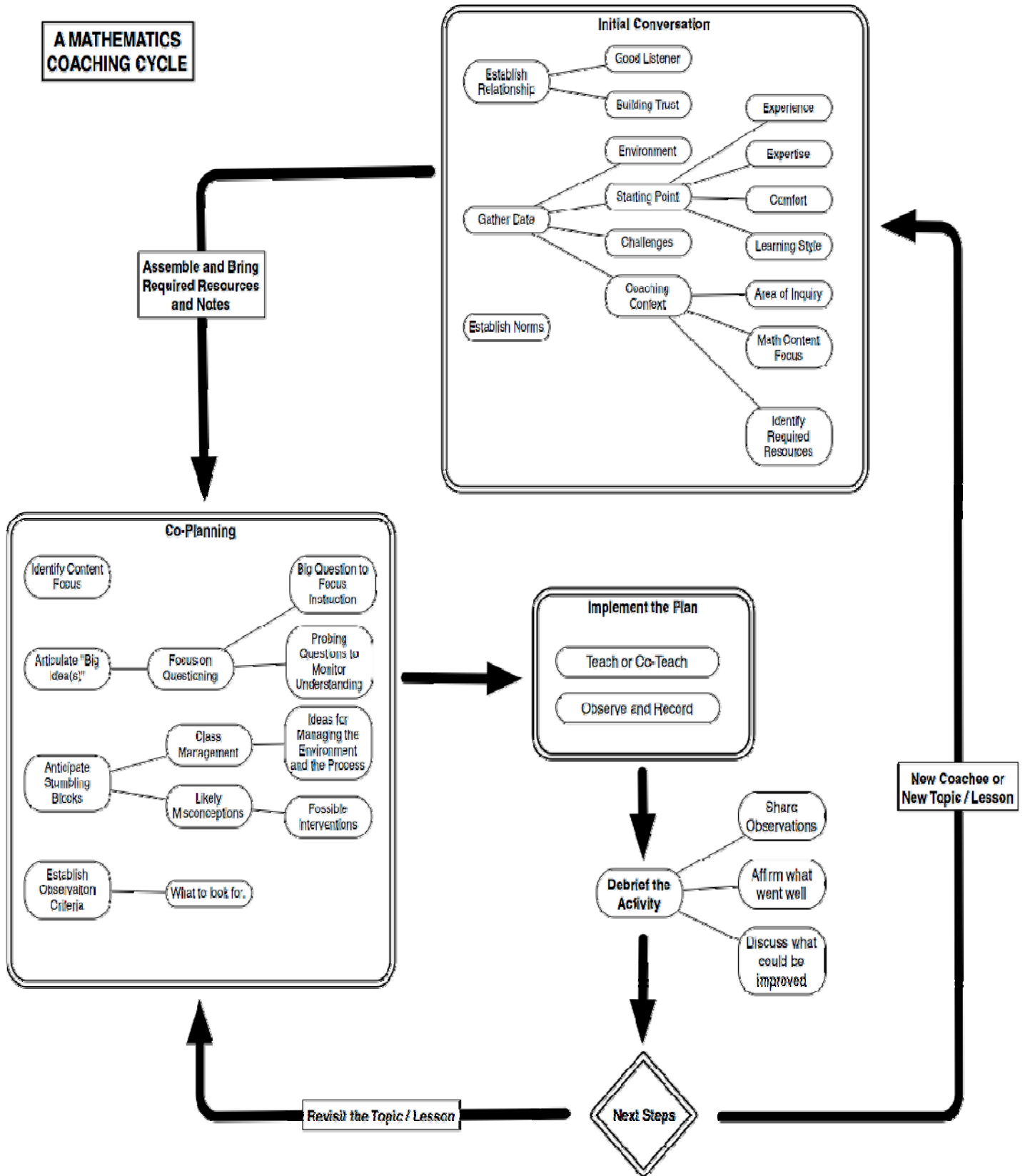
<b>Grade 7 Tiling Lesson Video Observation Guide</b>	
<b>'Look Fors' Identified in video Co- Planning Session and your own</b>	<b>Observation Notes</b>

Co-Planning Lesson Guideline		
<b>Instructional Trajectory</b>	Big Mathematical Idea(s)	
	Lesson Mathematical Learning Goals	
	Prior Knowledge	
	Subsequent Lesson(s)	
	Student Misconceptions	
<b>Strategies</b>	Instructional	
	Literacy	
	Thinking Tools	
	Powerful Question to address Big idea and other Questioning for DI	
	Other DI	
<b>MTLC Admin. Guide</b>		
<b>Observation 'Look Fors'</b>		

<b>Grade 8 Volume-Surface Area Lesson Video Observation Guide</b>	
<b>'Look Fors'</b>	<b>Observation Notes</b>

<b>Grade 9 Volume-Surface Area Lesson Video Observation Guide</b>	
<b>'Look Fors'</b>	<b>Observation Notes</b>

**A MATHEMATICS COACHING CYCLE**



## FEEDBACK FORM DAY 2

### Developing Coaching Practices for Math GAINS

Thank you for taking the time to complete this, your feedback is valuable to us.

In your role as a math coach, what division(s) are you supporting? (circle all that apply)	Intermediate Senior
<b>Please rank each of the following aspects of this inservice from (1) “No, not very useful to (5) “Yes, very useful”</b>	
Reviewing/sharing the homework readings	not very                      very 1   2   3   4   5
Debriefing/ receiving feedback on co-planned lesson	not very                      very 1   2   3   4   5
Exposure to and practice of coaching question strategies (question stems)	not very                      very 1   2   3   4   5
Viewing Marian Small video and role play debrief with teacher	not very                      very 1   2   3   4   5
Viewing Shawn’s video and role play debrief	not very                      very 1   2   3   4   5
Role play the case study (Josh)	not very                      very 1   2   3   4   5
Developing own scenarios and role playing it	not very                      very 1   2   3   4   5
Being presented with coaching cycle (graphic)	not very                      very 1   2   3   4   5
Consolidation: Activity Revise Frayer model Inside outside circle	not very                      very 1   2   3   4   5
Interacting with other coaches	not very                      very 1   2   3   4   5

Please answer the following using the reverse if more space is required:

★ The most beneficial *aspect(s)* of the professional learning for me was...

★ The modifications that would enhance the value of this inservice for future participants are....

★ Further support I need in my role as mathematics coach is....

Other comments:

## FEEDBACK FORM DAY 1

### Developing Coaching Practices for Math GAINS

Thank you for taking the time to complete this, your feedback is valuable to us.

In your role as a math coach, what division(s) are you supporting? (circle all that apply)	Intermediate Senior
What was your role before you became a coach?	
<b>Please rank each of the following aspects of this inservice from (1) “No, not very useful to (5) “Yes, very useful”</b>	
Interviewing other coaches “getting to know you”	not very                      very 1 2 3 4 5
Developing Frayer Model of “Coaching”	not very                      very 1 2 3 4 5
Categorizing data collected on characteristics of coaches	not very                      very 1 2 3 4 5
Background Information on Questioning and Coaching Initiative	not very                      very 1 2 3 4 5
Indicators of Effective Math (Guide for Administrators, MTLC)	not very                      very 1 2 3 4 5
Instruction and practice on parallel questions and opening questions	not very                      very 1 2 3 4 5
Exposure to and practice of coaching question strategies (question stems)	not very                      very 1 2 3 4 5
Viewing the videos of the coaching cycle	not very                      very 1 2 3 4 5
Practice using question stems in role play situations	not very                      very 1 2 3 4 5
Role playing the coaching cycle	not very                      very 1 2 3 4 5
Using premade “look fors” and “observation” templates	not very                      very 1 2 3 4 5
Developing/using “look fors” and “observation” templates	not very                      very 1 2 3 4 5
Co –planning a lesson	not very                      very 1 2 3 4 5
Exposure to resources	not very                      very 1 2 3 4 5

Please answer the following on the reverse:

- The most beneficial aspect of today was...
- I would like to do/see/discuss more about....