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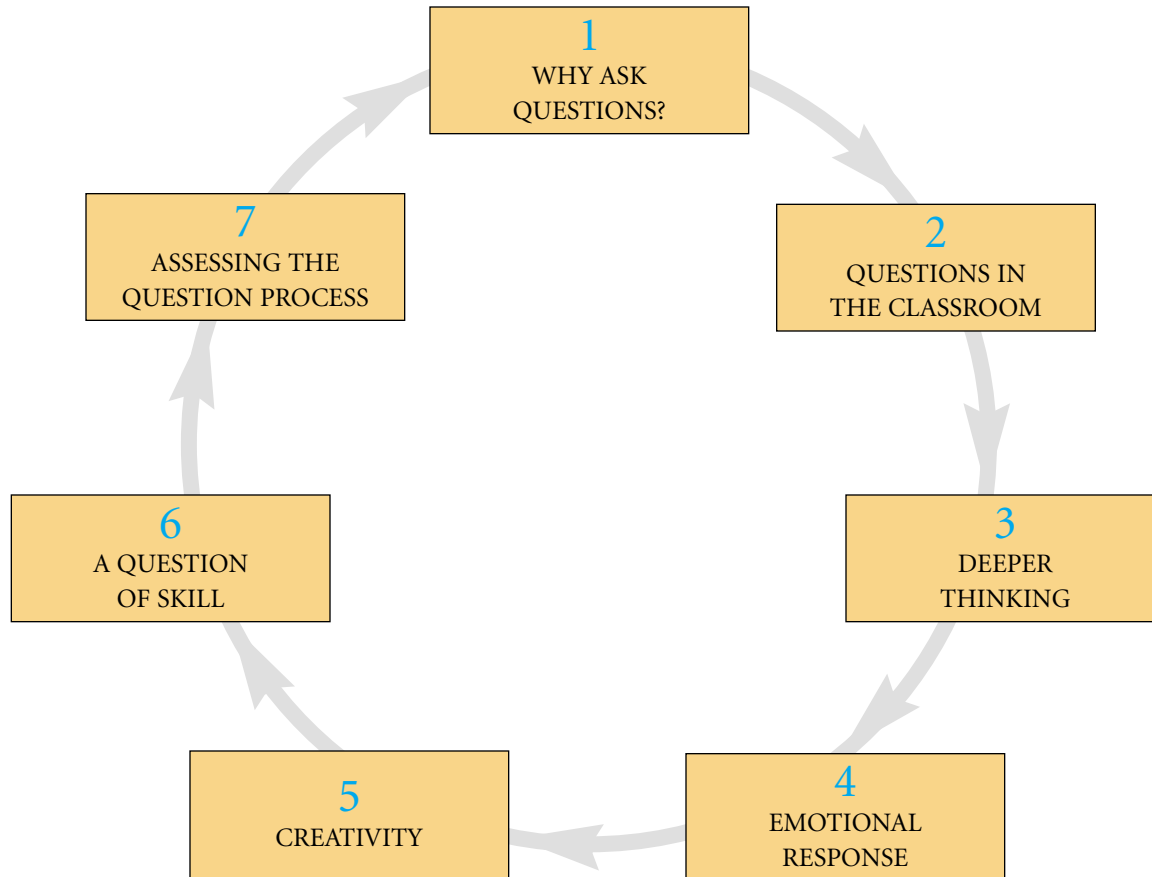
Out of the Question

Guiding students to a deeper understanding of what they see, read, hear, and do



The process of deciding what is relevant, what is of interest, what is legitimate, what is authentic, and what requires further investigation demands the ability to ask questions.

This book provides both teachers and students with the basics they need to succeed in critically questioning what they see, read, hear, and do.



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What Comes “Out of the Question”?

Asking questions is pivotal to learning how to learn and becoming a lifelong learner. In a technology-driven world, where information overload is often an issue, it is essential that people have the skills to critically question what they see, read, and hear. Effective questions support informed decision-making.

Questions help people make sense of the world, and questioning skills empower people as learners. They are pivotal for solving problems, creating solutions, and enacting change. Importantly, asking questions assists students in participating actively in their world and in the wider context of a democratic society.

Questions can

- Excite interest or curiosity
- Direct thinking in a particular way
- Focus attention on a topic
- Encourage active engagement in learning
- Challenge
- Reinforce learned material
- Structure or guide the learning of a task
- Assess
- Encourage reflection on learning
- Help clarify understanding
- Model thinking
- Access a particular type of thinking (e.g., critical, creative, reflective)
- Help make connections
- Spark further questions
- Motivate inquiries
- Identify gaps in learning
- Provide opportunities for learning through discussion

Effective Questioning

Questions should always be driven by purpose and context. When a question engages students and motivates them to ask further questions or challenge their ideas, it has the potential to take students beyond their current thinking.

- Use questions that are predominantly open-ended, thought-provoking, and non-judgmental.
- Plan some questions in advance. Build up to the more challenging questions so that students have time to gain confidence.
- Focus on a few carefully constructed open-ended questions, rather than a quick succession of closed questions.
- Frame questions as clearly and concisely as possible.
- Ask one question at a time.
- Consider the need for think-time. Avoid the trap of answering your own question if students are seemingly slow to respond.
- Vary the strategies used so that questioning does not become predictable.

- Ensure every student has the opportunity to respond to some questions.

Teachers can encourage effective student questions by what they say, and by the ways they provide feedback to student responses, use silence, accept and clarify student questions. Points to consider for helping students to ask effective questions include

- building a shared language for questioning
- introducing different questioning strategies and discussing these with students
- developing student awareness of different types of questions and what type of thinking they require
- making space for student questions and celebrating them.

This book encourages teachers to think about how questioning is critical both for their own learning and their students' learning.

1. WHY ASK QUESTIONS?

Questions in Context

Who asks the questions in a classroom? In some classrooms there is an expectation that the teacher will be the question-asker and students the question-answerers. The classroom culture needs to encourage students to be both question-askers and question-answerers.

Approaches to questioning may vary slightly in accordance with the context—whole class, small group, or individual student.

Whole class Ensuring all students stay engaged can be challenging. In order to manage the whole-class dynamic, control of the questioning process is essential:

- Be inclusive.
- Redirect questions so that several students can respond.
- Summarize responses to keep the class focused.
- Make explicit your expectations about appropriate ways to respond.

Small group Small-group learning offers greater opportunities for students to build their question-asking and question-answering skills. In this context, the teacher can distribute questions more evenly and take the time to assist students in clarifying ideas through exploratory talk. It is also easier for the teacher to step back from a more controlling role and to encourage students to respond to one another.

Students need opportunities to lead their own small-group learning in discussions and group conferences. When students question each other about their learning, it has the potential to generate higher-level thinking.

Individual student One-on-one scenarios in a conference situation provide excellent opportunities for students to reflect on their learning, and for teachers to monitor student learning. Questions need to be carefully framed so that the student doesn't feel a sense of interrogation. In this context, question-asking and question-answering should be viewed as joint responsibilities shared between teacher and student.

Encouraging Questions and Responses

It is important to make explicit your expectations about students being active question-askers. One approach is to jointly construct a chart identifying behaviors associated with a classroom culture that values questions. In response to the prompts *A question-friendly classroom is/is not ...*, students write statements about their beliefs and values.

A question-friendly classroom is a place where	A question-friendly classroom is not a place where
<ul style="list-style-type: none">• different responses to a question are encouraged• students build on each other's responses• students are prepared to challenge or contest a response• students generate questions for discussions	<ul style="list-style-type: none">• student responses to questions are put down• teachers are seen as the question-askers and students as the question-answerers• students recite a response to a question rather than discuss it

The way teachers encourage and receive student responses to questions transmits very explicit messages about their expectations of student learning and the classroom culture. If

the purpose of questioning is discussion, directing students to predetermined answers defeats the opportunity of open-ended questions. When students think that a particular answer is required (or valued) it might discourage them from responding to questions honestly. In the following example, the teacher's responses reduce an open-ended question to a closed question with a predetermined answer.

Teacher *What does war cost?*

Student *It costs love.*

Teacher *Yes, good.*

Student *It costs lives.*

Teacher *Costs lives, certainly.*

Student *It costs freedom.*

Teacher *Yes, we had it here. Great point, but you haven't got it.*

Student *Identity.*

Teacher *Good, but it wasn't what I was thinking of. I'll give you a clue. What didn't he have?*

Student *Love.*

Teacher *Partly.*

Student *Childhood and love.*

Teacher *Childhood. That's the one I like.*

Handling Student Responses

Strategy	Description	Application
Demonstrate active listening	Show students you are interested in their response.	Use nonverbal signals, such as facial expressions, a nod, eye contact, sitting forward.
Sustain the question	Use follow-up probes that encourage the clarification, extension, or elaboration of a response. Encourage a range of responses to the one question.	<i>Does anyone have a different opinion?</i> <i>Could you tell us a little more about that idea?</i> <i>Can you provide some evidence to support your point of view?</i>
Allow wait-time	Learn to be comfortable with the silences, so that wait-time is extended. Tell students why you are waiting.	Use affirmative nonverbal signals (such as a nod) that show engagement and provide encouragement.
Minimize feedback	Affirm student responses, but avoid excessive praise, which may silence alternative responses.	<i>That an interesting view.</i> <i>Yes, that's one way.</i> <i>Can anyone add to that?</i> <i>Thank you for that idea.</i>

Getting Started

The activities and strategies in this book have many possible adaptations and can be used with different age groups.

Topic Dice

Purpose: Evaluate student learning

Write questions related to the current topic on a large cube. One person at a time rolls the die and responds to the question.

Talk and Question Tokens

Purpose: Use of questions to initiate discussion

In a small group, distribute five yellow tokens (responses) and five blue tokens (questions) to each student. Each time a participant responds to a question or makes a comment, a yellow token must be returned to a tub; likewise a blue token when a question is asked. All participants must have the opportunity to use all their tokens.

Types of Questions

A very broad way of categorizing questions is to type them as open or closed. If a question is closed, the answer is non-negotiable and is simply recited; an open-ended question invites interpretation, there being no preconceived response. Open and closed questions are sometimes respectively referred to as divergent and convergent questions, lower-order cognitive and higher-order cognitive questions, or sometimes (in student language) as fat and skinny questions. While there are subtle differences, these terms are often used interchangeably.

Three broad categories that might assist when planning a sequence of questions for a lesson or unit of work are cognitive, affective, and creative. It is essential to make these explicit to students so that they can expand their ways of considering and generating questions, and develop language skills associated with questioning.

Open and Closed Questions

Purpose: Differentiate between open-ended and closed questions

1. Write one topic word on a sticky note for each class member and stick on the student's back. To figure out what is written on their label, students may ask only questions that have a yes or no response. Explain that these questions are "closed" questions, as they don't require students to engage in deeper-level thinking.

Discuss the benefits and disadvantages of questioning in this way. Discuss any strategies the students might have developed to find the answer.

2. Use postcards to demonstrate the way an open-ended question is constructed. As a class, construct five open questions relating to the picture on a postcard. In small groups, students practice writing open questions for their own postcards. Questions and cards are exchanged, and each group uses their postcard and set of questions for a small-group discussion.

2. QUESTIONS IN THE CLASSROOM

Self-Questions and Metacognition

Questions that elicit reflection and metacognition are very important. Some argue that reflection and metacognition are central to learning. They assist in monitoring and self-regulating learning, particularly in student-centred classrooms.

Reflective questions engage the learner/thinker in purposeful consideration of the effectiveness of actions and experiences.

Metacognitive questions focus on the learner's awareness, evaluation, and regulation of their own thinking. When students use metacognition, questions relate to making decisions, choosing appropriate strategies and thinking processes, self-assessing their own thinking, planning action, and setting goals.

Create question strips by copying and cutting apart student questions from the table to the right. Strips can be used to engage students in reflection and metacognition.

Reflective	Examples of Questions
Teacher reflection of teaching practice	What were the strengths of this lesson/unit? What were its weaknesses? How useful were the assessment tasks?
Questions to elicit student reflections	What team skills did your group use? What did you like about the activity?
Student reflection	What did I contribute to the group? What aspects of my work need to be improved? What skills have I improved in this unit?
Metacognitive	Examples of Questions
Teacher metacognition of teaching practice	How can I support students' learning? What did I learn about the way students process information?
Questions to elicit student metacognition	Why might we be studying this topic? What are your big questions? What goals will you set for your learning?
Student metacognition	What do I want to find out? What questions do I have? How will I source the information? What did I learn? What learning strategy worked best for me?

Different Levels of Cognition

Bloom's Taxonomy of cognitive processes is readily adaptable for designing questions that target specific levels of thinking.

Bloom's Taxonomy

Cognitive Level	Processes	Verb Stems
Knowledge ↓ Remembering	Recalling factual information	name, state, define, repeat, list, recall
Comprehension ↓ Understanding	Understanding information	explain, identify, describe, compare, report, outline, tell, locate, review
Application ↓ Applying	Using previous knowledge, concepts, principles, or theories in new situations	apply, practice, use, demonstrate, illustrate, dramatize, interpret
Analysis ↓ Analyzing	Breaking information into parts and showing an understanding between the parts	analyze, contrast, compare, question, debate, relate, examine, identify

Cognitive Level	Processes	Verb Stems
Synthesis ↓ Creating (Switched with Evaluating as the highest level of thinking)	Generating new ideas, planning, and producing	compose, propose, suggest, plan, design, construct, invent, formulate, create, arrange, prepare
Evaluation ↓ Evaluating	Critiquing, making a judgment on the values of consistency of a process, product, or idea	judge, assess, decide, rate, evaluate, measure, estimate, choose

Questions to Encourage Deeper Thinking

Thought-provoking questions provide a useful tool for supporting students to take responsibility for thinking more deeply, and generating more considered responses to questions. These questions require students to clarify, justify, and extend their ideas and opinions.

Fairytales

Purpose: See the different levels of thinking that can be required by a question

Introduce students to the following set of questions designed around Bloom's Taxonomy for the story *Little Red Riding Hood*. Groups of students each take a different fairytale or story and design their own questions.

Remembering	Where did Little Red Riding Hood's grandmother live?
Understanding	What was the purpose of Little Red Riding Hood's visit to her grandmother?
Applying	If your grandmother was sick and you went to visit her, what would you take her?
Analyzing	Why do you think Little Red Riding did not recognize the wolf?
Evaluating	Do you think Little Red Riding Hood's mother behaved responsibly sending her to visit Grandma on her own?
Creating	How might the story have been different if Little Red Riding Hood had her cell phone?

The Q-Matrix

Purpose: The development of questions that target different thinking levels

	Event	Situation	Choice	Person	Reason	Means
Present	What is...?	Where/ when is...?	Which is...?	Who is...?	Why is...?	How is...?
Past	What did...?	Where/ when did...?	Which did...?	Who did...?	Why did...?	How did...?
Possibility	What can...?	Where/ when can...?	Which can...?	Who can...?	Why can...?	How can...?
Probability	What would...?	Where/ when would...?	Which would...?	Who would...?	Why would...?	How would...?
Prediction	What will...?	Where/ when will...?	Which will...?	Who will...?	Why will...?	How will...?
Imagination	What might...?	Where/ when might...?	Which might...?	Who might...?	Why might...?	How might...?

(Adapted from Wiederhold 1995)

Put all the key words onto flashcards. Make two different colored sets: one with *what, where, which, who, why, and how*; and another with *is, did, can, would, will, and might*. Students select a card from each set and brainstorm all the questions they can think of containing those words.

The Five Whys

Purpose: Use probes to extend a response or acquire more in-depth information

This is a paired activity, in which one person takes the role of questioner and the other answers the questions. After each response, the questioner uses the response to create a new “why” question. Each person needs to listen carefully to the other. The pair aims to ask five questions that get a new, usually more in-depth, answer.

Five is a random number; it is more important that students listen and think carefully about their questions and responses than that they reach the fifth question. It is interesting to hear where each pair ends up—the final question and response.

Example:

Question: *Why do we have a school cafeteria?*

Answer: *Because people want to buy lunch.*

Question: *Why do people want to buy lunch?*

Answer: *Because they prefer bought lunches to lunches they bring from home.*

Question: *Why do they prefer lunches bought from the cafeteria?*

You Are a Reporter

Purpose: Frame questions that will elicit in-depth information

Students prepare questions to interview a peer. This could be related to things they have been doing at school or home. They can use the questions to survey others and report back on their findings.

Thinking on Your Feet

Purpose: Generate questions to clarify thinking

When students respond to questions in a standing position, more brain cells are activated. Plan some questioning that requires students to be on their feet. For example, create a values continuum ranging from “strongly agree” to “strongly disagree,” where students are asked to position themselves in relation to particular statements. Once students are positioned, question them about their stance, encouraging them to be flexible in their thinking and to change positions if convinced by the arguments of their peers.

3. DEEPER THINKING

The Affective Domain

Questions that address our feelings and emotions are associated with the affective domain. They are central to our hearts and souls, and are sometimes referred to as essential questions (McKenzie 2000). These questions probe complex matters that elude simple answers. Examples of these questions include

- What does it mean to have integrity?
- Who do I consider to be somebody with integrity?
- What does it mean to be a good friend?
- Who do I consider to be my good friends?
- How can I be a better friend?

Krathwohl et al's (1964) Affective Domain Taxonomy is concerned with emotional responses, and was designed to complement Bloom's Taxonomy. While not as widely known to educators as Bloom's Taxonomy, its significance should not be overlooked. Chambers (1994), known for his work in developing literature circles and enhancing the quality of student discussion, advocates the importance of starting with questions that address students' emotional responses before moving on to more directed questions. Typical questions would be

- What did you like the most?
- Was there anything you did not like?
- What was something that puzzled you?
- Was there anything that made a pattern?

Instructional Objectives for the Affective Domain

Cognitive Level	Instructional Objectives	Useful Verbs for Framing Questions
Receiving	Listening or attending closely	recall, recognize, observe, select, reply, use, feel, identify, describe
Responding	Showing active interest or enjoyment	answer, assist, compile, discuss, perform, present, tell, label, practise, report
Valuing	Demonstrating commitment, concern, or involvement	complete, form, join, justify, report, share, select, argue, study, persuade
Organization	Constructing a value system	adhere, alter, arrange, combine, compare, define, explain, identify, modify, synthesize, defend, integrate, articulate
Characterization by value	Acting in accordance with an established value system	discriminate, display, influence, qualify, question, revise, solve, verify, propose, review, judge, resolve, rate, conclude

(Adapted from Krathwohl et al 1964)

Risk Taking

Asking questions and responding can feel risky to students, especially when dealing with issues that carry emotional weight, or when points of view or opinions are in conflict.

It is important for students to learn about responding to each other appropriately, particularly when contesting a peer's response to a question. Reliance on teacher modeling of appropriate ways to challenge an idea or opinion may not always be sufficient. Some explicit teaching of the skills through an activity can help students acquire the language required for framing such responses, and prevent disputational talk.

Providing students with some assistance in rehearsing responses to a contested idea is a useful strategy. For example:

- Have you considered the point of view of...?
- What about considering this point of view...?
- I agree with what you say, but I also think...
- Another way of looking at the situation is...
- Yes, but what would you think if...?
- That's one way, but another possibility is...

Encourage students to develop their own lead-ins to challenging a response. Their examples and the ones listed above could be recorded on a chart or strips and can be used by students during small-group discussions.

Ensuring that students feel comfortable about challenging a response to a question should not be underestimated. Without the necessary skills, students may be reluctant to contribute alternative perspectives and ideas, resulting in conformity or a groupthink approach to discussion. If your aim is for students to explore ideas through open-ended, higher-order questions, they must learn to value a diversity of opinions and ideas.

Wear My Shoes

Purpose: Ask questions that take into account other perspectives and points of view

1. Students try to imagine being in someone else's shoes.

Example:

A war is about to break out in your city. What questions might be asked by local citizens, the military, the families of those in military service, etc.?

2. Alternatively, provide a range of old eyeglasses (lenses removed) and have students wear them as props. Students try to "see" the issue being discussed using different perspectives.

Emotional Questioning

Purpose: Develop questions that encourage emotive responses

Use multiple sets of cards with question types written on them, as follows:

Prediction/ imagination	What if...? What would happen if...? What could happen if...?
Quantity questions	List all the things... How many ways...?
Compare-and-contrast questions	How is it the same? How is it different?
Emotion and motivation	Make 'em laugh; make 'em mad; make 'em sad. (Discuss a controversial issue. Be provocative.)
Point of view	How would an ant feel about an elephant?

Organize the students into small groups. Provide each group with a stimulus picture or an article selected from the newspaper, and a set of question-type cards. Each group prepares at least one question to match each question type. Students can then answer each other's questions.

Considering All Points

Purpose: Challenge or contest a point of view that differs from your own appropriately and respectfully

Create question cards with generic questions.

Examples:

- Why did you say that?
- Is that a good enough reason?
- What are some possible explanations?
- When would that not happen?
- How do you know?
- What would the consequences be?
- Do those two ideas agree?
- How is that different from what was said?
- What questions would be useful to ask?
- What have we learned?

Students prepare posters with controversial statements. Display the posters and discuss why they are likely to produce a range of diverse opinions. Discuss what might have influenced people to develop the views they hold. Students suggest ways they can respond politely to a view with which they disagree. Group members choose a question card to respond to another student's views.

3 Cs and 3 Ps

Purpose: A user-friendly questioning framework that combines the cognitive and affective domains

This questioning model is a practical application of two of Bloom’s domains: cognitive and affective. It requires students to critique, compare, make connections, consider a range of perspectives, personalize the issue/idea, and prioritize.

Think about it		Feel it and act on it	
Critique	What do you know and believe? What might you expect to happen? What are all the factors involved? What are the gaps or silences? Whose view dominates? What are the strengths and weaknesses?	Ponder perspectives	What is another way of thinking about this? What perspective is missing? How would the situation change if...?
Compare	What if you compare...? What are the similarities between _____ and _____? What are the differences between _____ and _____?	Personalize	If you had to choose _____ what would you decide? What is your opinion? What do you care most about? Who might have a different point of view? How could you apply your learning to your life? How does this fit with your thinking when we started the unit? How does this relate to your situation? Have you changed your ideas? If so, how and why? How do your actions influence others?
Connect	If you put all the factors together, what are the big ideas? What are the main ideas? What relationships can you make? What are some of the causes and consequences?	Prioritize	What is the most important? What is the least important? Which point do you need to address first? What can you leave until later?

4. EMOTIONAL RESPONSE

Creative Thinking

There are eight processes identified with creative thinking: fluency, flexibility, originality, and elaboration align with the cognitive domain (thinking abilities); curiosity, complexity, risk taking, and imagination with the affective domain (feeling abilities). Higher-order thinking skills and creativity go hand-in-hand.

Processes Associated with Creative Thinking

	Description	Examples
Fluency	Generating many ideas	<ul style="list-style-type: none"> Brainstorm different ideas about how technology will change teaching and learning. List all the ideas you have for reusing damaged CDs.
Flexibility	Generating varied, different, or alternative ideas	<ul style="list-style-type: none"> What other perspectives are there to consider? What other ways could this problem be solved?
Originality	Generating unusual, unique, or new ideas	<ul style="list-style-type: none"> A wildcard scenario might be... What words might you have spoken had you been the first person to step on the moon?

	Description	Examples
Elaboration	Generating enriched, embellished, or expanded ideas	<ul style="list-style-type: none"> How could you extend this idea to _____? If you wanted to get younger children interested in this book, what would you say?
Risk taking	Experimenting with and exploring ideas	<ul style="list-style-type: none"> If you took an opposite tack, what might the outcomes be? If you were forced to flee the country, what experiences might you have?
Complexity	Improving and explaining ideas	<ul style="list-style-type: none"> What would happen if we added...? How could we change the end result?
Curiosity	Pondering and questioning ideas	<ul style="list-style-type: none"> What if...? What if you had wings? How might the government work differently if children were allowed to vote?
Imagination	Visualizing and fantasizing ideas	<ul style="list-style-type: none"> Imagine that... Imagine that you were the leader of the country for one day. What would you do?

(Adapted from Dalton 1985 & Gross et al 2001)

Encouraging Divergent Thinking

This model includes seven question types that connect across the affective and cognitive domains.

Divergent Thinking Model

Type of Question	Description	Examples
Quantity	Quantitative examination	<ul style="list-style-type: none"> • How many...? • What examples can you give?
Change	Creative thinking	<ul style="list-style-type: none"> • What if you...? • What if one element was changed?
Prediction	Hypotheses, possible outcomes	<ul style="list-style-type: none"> • What might happen if...? • What would your hypothesis be?
Point of view	Give opinion and justify	<ul style="list-style-type: none"> • What's your opinion? • Could you extend your idea by considering another perspective?
Personal involvement	Personal point of view	<ul style="list-style-type: none"> • If you were... • What's your point of view?
Comparative association	Compare and contrast	<ul style="list-style-type: none"> • What are the differences and similarities between...?
Valuing	Feelings	<ul style="list-style-type: none"> • What is important to you?
Imagination	Visualizing and fantasizing ideas	<ul style="list-style-type: none"> • Imagine that... • If you were the leader of the country, what would you do?

(Adapted from Dalton 1985)

Creative Questioning

Purpose: Develop questions that encourage creative thinking

Use multiple sets of cards with question types written on them, as follows:

Prediction/ imagination	What if...? What would happen if...? What could happen if...?
Quantity questions	List all the things... How many ways...?
Compare-and-contrast questions	How is it the same? How is it different?
Emotion and motivation	Make 'em laugh; make 'em mad; make 'em sad. (Discuss a controversial issue. Be provocative.)
Point of view	How would an ant feel about an elephant?

Organize the students into small groups. Provide each group with a stimulus picture or an article selected from the newspaper, and a set of question type cards. Each group prepares at least one question to match each question type. Students can then answer each other's questions.

Six Thinking Hats

Purpose: Thinking critically, creatively, and reflectively

De Bono's six-hat thinking is a well-known strategy that encourages different types of thinking. It can be used to review student learning.

Hat	General	English Literature Focus	Math Multiplication tables focus
White	What have you learned?	After reading the introduction, what can you say about the characters and setting?	What have you learned in the last week?
Yellow	What are the highlights of your work?	What would you say are some of the positives of living in this era/place/family?	What multiplication tables do you now know well?
Black	What things could you have done better?	What difficulties do you anticipate for the characters in the future?	What multiplication tables do you need to work on?

Hat	General	English Literature Focus	Math Multiplication tables focus
Red	What do you feel about your accomplishments?	How have your feelings changed about the characters? What issues in the book concerned you?	How do you feel about your progress with learning tables?
Green	What could you have done differently?	If you were the author, how would you have started the story differently?	Is there another way you could learn your tables?
Blue	What would you say about your progress? What questions do you now have?	What issues has the author tackled and ignored? What questions would you like to ask the author?	Overall, what do you think about your understanding of multiplication?

SCAMPER

Purpose: Design questions that encourage creative thinking SCAMPER—Substitute, Combine, Adapt, Modify (Magnify or Minimize), Put to use, Eliminate, and Rearrange (or Reverse)—is a useful creative-questioning strategy. Like all strategies, it should not be overused. It should be one of several strategies in the questioning toolbox to encourage creative thinking. Select the techniques that best suit your purposes, rather than use all seven at once. This strategy maybe applied to the study of a text or a unit of work:

- Adapting a product
- Thinking about an issue differently
- Solving a problem more creatively
- Considering alternatives to existing structures, storylines, etc.

(Adapted from Erbele 1972)

Example:

The questions in this sample are designed around the book *The Wishing Cupboard* (Hathorn & Stanley 2002)

S	Substitute	What items would you include in the wishing cupboard?
C	Combine	How might the story be different if Tran and Lan had opened the wishing cupboard together?
A	Adapt	How would you adapt the design of the wishing cupboard to suit your purposes?
M	Modify Magnify	Retell the story from the perspective of the mouse that visited the wishing cupboard. What might Lan add to the wishing cupboard if some drawers were added?
P	Put to another use	What would the wishing cupboard be used for in your home?
E	Eliminate	If all the items were removed, what might the family members now want to include?
R	Reverse	What might have happened if Tran’s grandmother had flown with her brother to find the special herb?

Developing Questioning Skills

The expectation that students will initiate questions must be demonstrated by creating space for student questions within lesson planning:

- When students ask questions, respond positively and attentively.
- Create spaces by remembering to ask: What questions were raised for you by doing this activity? What questions does this text raise? What questions do you have about today's class plan?
- Begin a new topic by asking what questions students have. These can be listed, displayed, and referred to as the topic develops.
- Compile a list of questions students have before beginning a topic discussion.
- Model questions that seek to clarify thinking. Be prepared to express uncertainty and openly question an authoritative text.
- Ask students to use sticky notes to write down questions that come to mind as they read. These can then be brought to class to generate discussion.
- Introduce some games and strategies that build students' skills in constructing questions.

Dos and Don'ts

DO

- Give appropriate feedback for the types of questions you want to encourage.
- Plan questions before the lesson.
- Display questions around the room that capture students' imagination and may challenge them to find the answers.
- Jointly construct lists of great questions that have always puzzled students about things, people, places, events, etc.
- Model self-talk and self-questioning.
- Allow time for students to think of an answer.
- Use student responses to ask further questions.
- Reflect on your techniques and strategies. Consider videotaping a class discussion or eliciting feedback from peers or students.

DON'T

- Ask a string of questions simultaneously.
- Neglect to sustain the question with probes.
- Ask a question and answer it too (rhetorical question).
- Target the same students every time or ask only students you think will give the best responses.
- Use questioning as a behavioral management tool.
- Begin with a very challenging question before students are feeling confident.
- Allow inadequate think-time for higher-order questions.
- Overlook the implications of answers.
- Insist on giving verbal feedback to every answer.

What's in the Box?

Purpose: Develop strategic questioning skills by applying the process of elimination

Place an object in a box and wrap it like a present. Tell students they cannot guess what's in it until they are absolutely sure. They must ask yes-or-no questions about the object until they are secure in their guesses. If they guess incorrectly the game is over.

Example:

Question	Y/N
Is it alive?	No
Was it ever alive?	No
Is it round?	Yes
Is it bigger than a hand?	No
Is it soft?	No
Is it solid?	No
Is it white?	Yes
Is it breakable?	Yes
Is it an egg?	Yes

Celebrity Heads

Purpose: Be a strategic questioner by applying the process of elimination

Select three or four students to sit at the front of the class facing the others. Give each a word they have not seen to place on his or her head. To guess their own words they take turns asking yes-or-no questions of the audience. If they get a yes response, they get the chance to ask another question; a no response means they have to wait until their next turn. The game ends when one person guesses the word on his or her head. A clue might be given at the beginning to narrow the guessing field; e.g., they are all mammals.

Take a Stand

Purpose: Develop skills of asking and answering, and of evaluating responses to questions

The class is divided into three groups. One group must take a position on a problem and another group takes the opposite position. The third group develops a list of questions for both positions. After hearing the responses, the third group must make a considered decision about how the problem might be solved.

6. A QUESTION OF SKILL

Questions about Questioning

When do you tell students the answers?

In student-centred classrooms, students have the major responsibility for posing and finding out the answers to their own questions. If teachers answer their questions, students will not have anything to answer themselves. However, there are situations when teachers should answer student questions to avoid student frustration and to allow them to move forward:

- the necessary resources are unavailable or unsuitable
- students have tried to answer their questions for a reasonable amount of time
- an answer is needed for students to complete the task
- students are becoming frustrated or discouraged by dead ends to their answer seeking
- a simple answer will allow students to proceed onto a more complex task

How do you assess questions?

The type of questions that students ask—such as critical, creative, or reflective questions—are generally assessed informally; for example, through observation of student participation in whole-class and small-group discussions, and through questions students pose for project work, inquiry units, and reflective journal entries. A rubric has been developed for this book (see p. 27); however, rubrics work most effectively when they are jointly constructed by the teacher and students to meet the individual needs of the class.

Audio or videotaping a discussion is particularly useful for assessment of teacher and student questioning.

How do I build questions into my plan?

While questions are asked spontaneously in relation to student comments and lesson outcomes, planning of some key questions or discussion statements can improve the quality of questioning. If an inquiry-based unit is being undertaken, some focus questions can be generated at different stages of the inquiry process. Similarly, planning of specific questions can occur for different stages of a lesson. When planning key questions

- Make questions clear and succinct.
- Sequence questions in a logical order.
- Match questions to students' experience and abilities.
- Focus on eliciting higher-order thinking, generalizing, and conceptualizing rather than recalling factual information.

Generic questions for stages of a unit/lesson

Beginning

What do you need to do/know to get the task done?

What different methods/approaches could be useful?

How does this task connect with other tasks you have done?

How will you ensure everybody contributes to the task?

During

What do you remember from last time that may be helpful?

How are you progressing?

Do you need to change your strategies?

What information do you still need?

End

What achievements are you most proud of?

What is something that has taken your interest?

What is something new that you have learned?

What is something that still confuses or puzzles you?

What if students don't ask good questions?

Ask any parent and they will tell you that children ask endless and complex questions. However, they may be reluctant to do so at school. The following ideas might encourage student questioning:

- Model interesting and varied questions.
- Make time for questions throughout the lessons.
- Instead of asking students questions, tell them the answers and have them pose appropriate questions.
- Display questions around the room with the answers that have been found by students.
- Create situations that arouse student curiosity.
- Initiate awards for the best questions. Categories could be determined by the class.
- Use student questions for discussions.
- Ask questions that make students want/need to seek outside of the classroom.
- Discuss different types of questions and identify them when used.
- Have students design quizzes for others.
- Use questioning taxonomies and strategies to structure and vary questions.
- Play games with questions.

Assessment and Record-keeping


Some formal record keeping is useful for assessing the development of students' questioning strategies and skills, and for evaluating the effectiveness of the teaching focus on questioning. While ongoing monitoring may occur informally, evidence is needed to demonstrate student improvement, albeit in a qualitative way, to parents and for school record-keeping purposes.

Sticky notes may be helpful for anecdotal observations about the type of questions students initiate and their responsiveness to questions in small-group and whole-class discussions. Notes can then be transferred to formal record-keeping procedures. A reproducible for record-keeping is provided on page 28, and the rubric on page 27 is an alternative way in which students can self-assess their achievements.

Question Awards

Purpose: Celebrate and encourage effective questioning

Students generate questions that might be nominated as most creative, most thought-provoking, most controversial, etc.

	Question Award
	Awarded to _____
	For the most _____ question
	Question: _____
	Signed: _____

7. ASSESSING THE QUESTIONING PROCESS

SUPPORTING STUDENT QUESTIONS

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Teachers should think about the types of questions they would ask as part of the planning process. The following checklist may be useful to help reflect on the strategies, structures, and support given to developing effective questions in the classroom.

	Usually	Sometimes	Never
Do I model a variety of questions and questioning strategies?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do I think about the purpose of the question?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do I include questions when planning?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do I make time for students to ask questions and find out the answers for themselves?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have I organized opportunities for students to adopt different questioning roles?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do I use students' prior knowledge to help further their ideas?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do I encourage students to discuss their thinking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do I show that I am interested in different types of questions?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do I use self-assessment to elicit self-questioning?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do I use probing questions rather than just accepting the first answer to questions?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do I explain why I asked a particular question?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do I verbalize questions about my own actions?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do I encourage students to listen to each other and ask questions of each other?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do I encourage students to listen to a range of possible answers?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have I established an environment where students feel free to ask questions and take risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do I allow wait-time for students to answer questions?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do I listen to student ideas and build on their responses?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SELF-ASSESSMENT RUBRIC

Name: _____

Circle the description that applies to you.

Question-asking	I always ask questions confidently; to clarify my thinking; to seek more information; to critically analyze information; and to get feedback from others.	I usually ask questions confidently; to clarify my thinking; to seek more information; to critically analyze information; and to get feedback from others.	I sometimes ask questions confidently; to clarify my thinking; to seek more information; to critically analyze information; and to get feedback from others.	I never ask questions confidently; to clarify my thinking; to seek more information; to critically analyze information; or to get feedback from others.
Question-answering	I always use think-time when responding to complex questions; respect different ideas; and am flexible in my thinking.	I usually use think-time when responding to complex questions; respect different ideas; and am flexible in my thinking.	I sometimes use think-time when responding to complex questions; respect different ideas; and am flexible in my thinking.	I never use think-time when responding to complex questions; respect different ideas; or am flexible in my thinking.
Question types	I always consider the purpose for my question; and use different types of questions for different purposes.	I usually consider the purpose for my question; and use different types of questions for different purposes.	I sometimes consider the purpose for my question; and use different types of questions for different purposes.	I never consider the purpose for my question; or use different types of questions for different purposes.
Planning	I always use questions to assist in the planning, organizing, and reviewing of my work.	I usually use questions to assist in the planning, organizing, and reviewing of my work.	I sometimes use questions to assist in the planning, organizing, and reviewing of my work.	I never use questions to assist in the planning, organizing, or reviewing of my work.
Self-monitoring	I always ask questions to check my progress; assess my learning; make connections between ideas; and set future goals.	I usually ask questions to check my progress; assess my learning; make connections between ideas; and set future goals.	I sometimes ask questions to check my progress; assess my learning; make connections between ideas; and set future goals.	I never ask questions to check my progress; assess my learning; make connections between ideas; or set future goals.
Risk taking	I am always prepared to ask questions about tentative ideas; to ask creative questions; and to challenge ideas different from mine.	I am usually prepared to ask questions about tentative ideas; to ask creative questions; and to challenge ideas different from mine.	I am sometimes prepared to ask questions about tentative ideas; to ask creative questions; and to challenge ideas different from mine.	I am never prepared to ask questions about tentative ideas; to ask creative questions; or to challenge ideas different from mine.

An effective question I recently asked: _____

Two aspects of questioning I want to improve: • _____
• _____

My plan of action is _____

ASSESSMENT CHECKLIST

Name: _____

Question-asking	OFTEN	SOMETIMES	NEVER	COMMENTS
Asks questions confidently				
Initiates questions in a discussion context				
Asks clarification questions				
Asks divergent questions				
Asks questions to extend understanding				
Directs questions to peers				
Asks questions to get feedback from others				
Takes risks with question-asking				
Asks critically analytical questions				
Question-answering				
Takes think-time before answering complex questions				
Is prepared to explore tentative ideas				
Contests ideas and opinions appropriately				
Respects that people have different perspectives and points of view				
Planning				
Uses effective questions to focus an investigation				
Uses questions to organize an approach to a task				
Uses questions to review work				
Self-monitoring				
Uses questions to self-regulate and monitor progress				
Uses questions to make connections between ideas				
Uses reflective questions to assess learning				

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Out of the Question provides teachers with starting points for establishing a “question-friendly classroom.” Each step in this handy book helps students and teachers learn strategically as they explore layers of questioning and practical applications for understanding their respective worlds more fully.

Carol Koechlin, co-author of *Q Tasks*

Asking questions, when you care about the answers, is pivotal to learning how to learn. This 32-page flipchart encourages you to critically question what you see, read, hear, and do. Easy and inviting, **Out of the Question** explores the key issues:

- Why ask questions?
- Nurturing questions in the classroom
- Promoting deeper thinking
- Generating an emotional response
- Encouraging creativity
- Building questioning skills
- Assessing the question process

At the root of this practical book are activities to help you recognize effective questions that help you decide what is relevant, what is of interest, what is legitimate, what is authentic, and what requires further investigation. From the responsibilities of both teacher and student in question-asking and question-answering, to the structure of questions, to a rubric and checklist for assessing the process, this book is a quick and easy reference to the basics.



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