Segment 1: Effective Questioning (7:59)

Text on screen: This segment introduces oral questioning as an assessment for learning practice and explores the purposes of oral questioning.

Narrator:

Questioning enables teachers to explore students" thinking while they are learning so that we can respond to their needs in a timely way. Effective questioning makes students" thinking visible so that we can find out what they know and what they still need to learn.

Quote on screen: The art of questioning is central to the practice of teaching. (Fisher and Frey, 2007)

Research tells us that on any given day, teachers may ask up to four hundred questions. And since we already know the answers, why exactly are we asking?

In this video, teachers are engaged in professional learning about assessment for learning. When teachers assess for learning, their purpose is to gather information which will determine where students are with respect to their learning goals and what the next steps in learning should be. The achievement data gathered through assessment for learning is not used to evaluate a student"s achievement, or for reporting purposes. Rather, its benefit is in the feedback provided to students, and the opportunity for them to act on it while they are still developing the desired knowledge and skills.

Questioning is both an instructional and an assessment tool. In this video, we'll examine oral questioning as a core practice of assessment for learning.

Text on Screen: The "core" practices of assessment for learning:

- 1. sharing learning goals and success criteria
- 2. questioning
- 3. feedback
- 4. peer- and self-assessment

These teachers are working collaboratively to explore more effective ways of using questioning to improve their students" learning. They meet regularly to plan assessment and instruction, and to share how they will implement questioning strategies more effectively. They act as each other"s coaches and critical friends, inviting their colleagues to observe their teaching and to provide focused feedback.

In this video we explore:

- Planning questions for different purposes
- Giving students enough time to think about their responses
- Expanding questioning into "assessment conversations"

As you watch, there will be prompts to pause the video to reflect individually or with colleagues on your own classroom practice.

In assessment for learning, teachers act as "coach", engaging students in a dialogue to improve learning and providing feedback to determine where students are, where they need to go, and how to get there. Teachers use questions to discover what students are

thinking – that requires careful planning. But that s not enough. There are times when our questioning techniques prevent students from communicating their thinking.

Text on screen: As you view each of the following staged classroom interactions involving questioning, identify:

- what is effective, and
- what could be improved.

1

T: What we"re going to be doing today is to continue with our examination of the Canadian and American judicial systems. What would be the minimum age that you would have to be in order to be called for jury duty? Yes?

S: Eighteen.

T: Very good. And where would those names be chosen from? Danielle?

S: A voting list?

T: Very good as well. And what's the term that given when both the crown and the...

Text on screen: Pause the video to reflect or discuss how these questioning practices could be improved.

Text on screen: Closed questions can be used effectively to review, recap or check for understanding. Carefully crafted, open-ended questions engage students and promote higher-order thinking.

2

T: Why do you think height is important in calculations for volume? (pause) Let me ask it again. Without height, how can we calculate volume? Shauna?

Text on screen: Pause the video to reflect or discuss how these questioning practices could be improved.

Text on screen: Silence, or lack of student response, can feel uncomfortable; however, research emphasizes the need for "think" or "wait" time. Give students time to gather their thoughts and formulate a response.

3

T: And how many states in the United States have capital punishment? Susan, do you know the answer to this question?

S: Ummm...

T: Let's pay attention please...somebody else?

Text on screen: Pause the video to reflect or discuss how these questioning practices could be improved.

Text on screen: Effective questioning promotes student engagement.

4

T: OK boys and girls. I want you to look up at what we just finished reading. Tell me what the name of the building in the picture is. Katie.

S: The Eiffel Tower.

T: Good. Where is the Eiffel Tower? Sammy.

S: In umm, ...

T: Ok let"s go on to the next person.

S: In France?

T: Good it's in France. What is the name of the man who built the Eiffel Tower?

Text on screen: Pause the video to reflect or discuss how these questioning practices could be improved.

Test on screen: Slowing down the pace of questioning provides all students time to process the questions and their response.

Narrator:

According to your best guestimate, what percentage of questions falls into each of these three categories:

- Procedural (Does everyone have their textbook?)
- Closed, factual guestions (What is the capital of Ontario?)
- Open, higher cognitive questions (What would happen if we added a different chemical?)

Research varies, but you may be surprised to discover that:

- Sixty percent are closed questions, those that require a brief, factual response.
- Twenty percent are procedural, about the day-to-day management of the classroom.
- Open questions, those that make students think, are posed only 20% of the time in many cases even less in secondary schools.

Oral questioning is a powerful strategy to improve learning. When we ask the right questions, we discover what students are **thinking**. We are able to correct **misconceptions** and close **gaps**. And, we can discover what they like so we can **motivate** them and challenge them to think more deeply. Students" responses to our questions guide us in making instructional decisions for planning **next steps**.

Now it's your turn. A variety of differentiated activities has been provided for you. You'll find a list of annotated readings. There's a classroom observation and, there's a personal inventory on questioning. You can access these materials on the website.

Quote on screen: Fewer questions, better questions and time to think. (Morgan and Saxton 1994)

Segment 2: Planning Questions (10:57)

Text on screen: Effective questions elicit students" thinking, identify their misconceptions, and scaffold their learning. A three-step process for planning questions is presented.

Narrator:

Questioning enables teachers to explore students" thinking **while they are learning**, so that we can respond to their needs in a timely way. Effective questioning makes students" thinking visible so that we can find out what they know and what they still need to learn.

Quote on screen: More effort has to be spent in framing questions that are worth asking; that is, questions which explore issues that are critical to the development of students" understanding. (Black, Lee, Marshall, and Wiliam)

Asking the right questions is crucial. With careful planning, teachers can ask fewer but more strategic questions – building on students" prior knowledge, enabling students to make personal connections with the topic and, most importantly, identifying gaps in learning.

This video shows teachers engaged in professional learning about assessment **for** learning, and in particular, about using effective questioning strategies to improve their students' learning.

In this segment, teachers strategically plan questions that will promote thinking and engage students in discussion.

When planning questions, start by identifying the learning goals.

Learning goals are statements that use student-friendly language to describe what students should know and be able to do by the end of the lesson. They should be shared with students at the beginning of the lesson, and referred to during the course of instruction.

Text on screen: With clearly defined learning goals, questions can be crafted to:

- check for understanding
- identify misconceptions and challenges to learning

Let's join our teachers as they plan.

T1: I think that maybe what we want to do is start with what our big ideas are and see if we can work backwards, and maybe come up with some sort of task we"re going to give them to do

T2: and some key questions...

T1: OK. I think the big idea we really want to talk about is "how human actions affect the quality of the water and the quality of the air".

T2: Let me write that down.

T1: OK, so if that sour big idea, and that swhat we re moving towards, I think we have to identify some of the learning goals we want to do, just at the beginning of this lesson.

T2: OK, well let"s try and think how grade twosthink.

T1: Maybe we could start with just understanding why water is important in our lives.

Text on screen: Planning for Effective Questioning:

Step 1: Identify Learning Goals

Step 2: Develop a variety of questions relating to the learning goals.

Narrator:

Closed questions focus on recall of facts, and have right or wrong answers.

Text on screen: What is the third planet from the sun? How many people are on a jury for a criminal trial? What is the formula for the area of a circle? Who is the main character in the story?

Open questions invite students to consider many possibilities. There is no **one** correct answer. They are often the "why" and "how" questions that encourage exploration and discussion.

Text on screen: How will you ensure that the poster appeals to the target audience? Why is the sentence imposed for this offender appropriate? What would happen if the earth's average temperature rose by one degree?

They require students to analyze, synthesize, and evaluate information. When crafting open questions, think about ways to connect to students" experiences.

Text on screen: What does this have to do with me?

Closed questions are effective when the teacher"s purpose is to:

• check students" prior knowledge

T3: What is the definition of area?

help students learn new facts

T1: Who is the person who invented the Eiffel Tower? Or built it?

or review previous learning

T4: What was the last state to enact capital punishment?

Most closed questions should be at a level of difficulty that will elicit correct responses.

Since they require only factual answers, they can be used to encourage reluctant speakers to contribute – giving a factual answer can feel emotionally safer, as it doesn"t require venturing a personal perspective which can be judged by teacher or peers.

Reluctant students who experience success with closed questions may gradually build the confidence to interact more frequently and at a deeper level.

What closed questions fail to do, however, is to stimulate deeper thinking or discussion. It takes interesting, challenging, open questions to do that. Research shows that **only twenty per cent** of questions in most classrooms tend to be open – surprisingly even less in secondary classes.

Open questions have many benefits, such as increases in:

- o student participation and engagement,
- deeper thinking,
- o relevant student responses.

T1: So I guess what we need to do then is to be really clear on our purpose for asking the different types of questions so that we can plan them systematically.

An open question can be used to frame a lesson or series of lessons. This "key question" is designed to get students to think more deeply about a topic. Posting the question prominently in the classroom helps to keep you and your students focused on the learning goals.

Let"s join our teachers as they plan.

T1: I will pose the question "How does your family use water? Or even maybe, "How did your family use water today?" and have them just write their responses.

T2: Alright, if we say, "How did you family use water today?", are we going to get those recreational uses?

T1: No probably not.

T2: So we should say, "How does your family use water?"

T1: And just leave it at that.

T2: What are you going to do with this information once you get it from them?

T1: I think what we want to do is develop a list of questions that are going to help us sort that information, and we could record those on the web, and then use our different questioning techniques to see if we can develop, or have them come up with that synthesis and then name each of the categories.

T2: Alright.

T1: And then when the information is sorted, then we could say, "OK, let"s see what connections we have between the items on this section. What are the connections we have here?"

T2: So, how might you title this list?

Narrator:

Step Three of the planning process is anticipating student responses.

Consider this mathematics example. A teacher poses the following question: "How would you order these three fractions from least to greatest?"

Text on screen: Order these fractions from least to greatest. 5/6, 11/12, 1/3. Answer: 1/3, 5/6, 11/12

This correct answer shows that the student has grasped the concept, or does it?

What if this student believes that you can order fractions based solely on the numerator? She reached the correct answer based on incorrect thinking!

If the teacher anticipates this common misconception, how could the question be posed to correct the problem? You may pause the video here to reflect or discuss.

T1: (having just finished reading the article) It sounds crazy at first, but when I really I think about it, there are times when I can really predict some of the wrong answers my kids are going to come up with. For example, when we talk about living things needing water to sustain that life, some of my kids are going to say, "I don"t drink water – I drink juice or I drink pop" because they don"t have that clear understanding of how those things are composed.

This is also going to give us an opportunity to talk about the different states of water as well, particularly under that "recreation" one. So we"re going to have to, through questioning, elicit the fact that water can be under different forms.

T2: That's one of those misconceptions that we need to look at. Because I know a lot of students that think that water is always liquid, and they might not get ice. Let me get that down...so you're going to use some closed questions about the states of water?

T1: The last thing we have to decide is how will we know if they"ve got it?

T2: Exactly...so this might be a good opportunity to use an exit card.

T1: Explain what you mean.

T2: An exit card is ... it could be a sticky note, it could be a file card, a piece of paper, and we"re going to think of a question to ask the students, and they need to answer that question at the end of the class. Then we can take a look at their answers and use that as a formative assessment to see where we want to go or how well they"ve done.

T1: We also need to be aware of the fact that we"re going to have to scribe for some of the kids. OK, so what are we going to put on the exit card? What"s the question we want to ask?

T2: I think, "Why is water important?

T1: We could do that or we could ask them, "What did you learn about water today?"

Narrator:

Planning questions that promote students to think and communicate takes time, but in the long run, can actually save time. When teachers ask questions that encourage students to share what they know, and to explain their thinking, teaching is more precise. By anticipating misconceptions, teachers are better able to diagnose and resolve difficulties early.

T4: So, when you"re ready to start, three things to keep in mind.

Text on screen: Planning for Effective Questioning

Step 1: Identify the learning goals.

Step 2: Develop a balance of open and closed questions relating to the learning goals.

Step 3: Anticipate student responses.

Now it's your turn. A variety of differentiated activities has been provided for you. For example, you'll find a list of annotated readings, and a template for question planning that includes the 3-step planning process from this video. You can access these materials on the website.

Quote on screen: Fewer questions, better questions and time to think. (Morgan and Saxton 1994)

Segment 3: Questioning – Making Thinking Visible (7:04)

Text on screen: Teachers implement a variety of questioning strategies to probe students" thinking, encourage students to elaborate on their responses and create a safe environment in the classroom.

Narrator:

Questioning enables teachers to explore students" thinking **while they are learning**, so that we can respond to their needs in a timely way. Effective questioning makes students" thinking visible so that we can find out what they know and what they still need to learn.

Text on screen: In each and every case, we must be sure that we are asking the right questions and that we are making full use of the student responses that our questions elicit. (Afflerbach)

This video shows teachers engaged in professional learning about assessment for learning, and in particular, about effective questioning strategies to improve their students" learning.

In this segment, teachers use research-based questioning strategies to engage students in discussion to learn more about what students know and understand.

They have reviewed research articles on oral questioning strategies, which are provided for you on the website for this video. In their reading, they learned about the importance of changing their questioning paradigm.

Research shows that as much as 80% of classroom questions are factual or procedural. These "closed" questions are often posed as a series of fast-paced, isolated interactions where the teacher asks a question, a student answers, and then it so n to a different question.

Teachers need to increase their use of open, thought-provoking questions, and to introduce a different pattern of interaction, one where the teacher:

- o poses a question
- o reacts to the student"s response
- o and **uses** the students" answers

to explore and build on their understanding.

When reacting to the student's answer, you can use a variety of strategies to find out what your students are thinking and why. Some strategies to probe more deeply into the students' thinking include:

Text on screen: Asking for clarification

T: What else might we use to measure? Karishna.

S: You might need to use a piece of string to measure something circular.

T: Can you explain a little bit further how you would use a string to measure a circumference of a circle?

S: You take the piece of string, put it around the circular object and take that piece of string, put it against the ruler and you will know the length.

Text on screen: Encouraging students to expand on their answer

T: What other factors might come into a judge"s decision as to how long someone"s going to serve if it is less than 25 years? Victoria?

S: Um...parole.

T: Can you expand upon that, please?

S: Every so many years a prisoner can apply for parole.

Text on screen: Asking for a rationale

T: Why do you think height is important in calculations for volume?

Narrator:

Teachers can also use strategies to create a safe environment, one that encourages students to take risks.

Text on screen: Affirming effort

T: Can somebody explain to me what schema is? Thomas.

S: Your background knowledge in your brain.

T: Very good, Thomas, very good. I like the way you thought about that before you put your hand up.

Text on screen: Postponing to allow extra think time

T: Even if it is a horrible crime. Should the judge still have to take a look at the mitigating factors? Lora.

S: Um...ves

T: Why?

S: I don"t know

T: Give you a moment to come up with an opinion.

T: Now Lora, you"ve heard all of the different opinions. Anything you"d like to add or anything you"ve decided?

S: I kind of disagree with what Amanda said about how if they were concerned about their family that they wouldn"t go to like commit that crime in the first place but a lot of times they commit a crime to help their family. Like say you rob a bank because your

family is poor. That might have been them trying to help their family but they didn"t so, that so say they probably they wouldn"t commit that crime again.

Narrator:

A number of strategies allow teachers to build on students" responses:

Text on screen: Gathering

T: Let's take what Ashley said and think if there's any other things that might go with that.

Text on screen: Asking for analysis

S: Taking a shower.

T: Is swimming and taking a shower connected?

Text on screen: Redirecting

T: Can we go back to what Gerrard said about swimming? I am looking for a connection. Another thing that might be similar to swimming. Michaela.

Text on screen: Synthesis

T: We have washing hands. We have washing your body. How can we take those two ideas that we had from Nikka and Sammy and put them together? Ashlee?

Text on screen: Summarizing

T: Look carefully at these three ideas: to wash our hands, to wash our body, to shower. What's a big idea about that category? Sammy.

S: Keeping clean.

Narrator:

When teachers re-craft questioning into this kind of conversation, the paradigm shifts from isolated teacher-student interactions to a rich discussion where all members of the class are engaged. We"re not just looking for right answers; rather, we can discover what motivates our students, diagnose problems, and adjust what and how we teach—making instruction more personalized and precise

Now it's your turn. A variety of differentiated activities has been provided for you to help you refine your classroom practice. You'll find a list of annotated readings. There are examples of teacher-facilitated discussion and a viewing guide. You'll find an observation tool so you can invite a "critical friend" to observe your questioning and give you feedback. You can access these materials on the website.

Quote on screen: Checking for understanding through questioning should not be thought of as a simple two-step process (question and answer) but rather as a complex progression as the teacher formulates and then listens to the response of the learner. (Fisher and Frey, 2007)

Segment 4: Questioning In Action (10:31)

Text on screen: Working collaboratively, teachers observe a colleague"s videoed lesson in which he implements a variety of question types, and some of the strategies presented in Segment 3.

Narrator:

Questioning enables teachers to explore students" thinking **while they are learning**, so that we can respond to their needs in a timely way. Effective questioning makes students" thinking visible so that we can find out what they know and what they still need to learn.

Quote on screen: Put simply, the only point of asking questions is to raise issues about which a teacher needs in formation or about which the students need to think. (Black, Harrison, Lee, and Wiliam, 2003)

This video shows teachers engaged in professional learning about the assessment for learning and in particular about effective questioning strategies to improve their students' learning. In this segment teachers use research-based questioning strategies to engage students in discussion to learn more about what students know and understand.

T: Okay guys when we met the last time, we agreed that we would have our lessons video taped so that we can investigate what our questioning techniques look like but I must admit I find it a little difficult.

T: Me too but I brought my video and I do hope you"ll be kind to me. Popcorn anyone?

While we're watching look for ways the teacher uses students' answers to explore their thinking.

Text on screen: Key Question

T: What we're going to be taking a look at is the sentencing system in both Canada and the United States. And what we are going to be looking at for a question today is, "If you are convicted of a crime in either Canada or United States, where were would you like to be sentenced?"

Text on screen: Using closed questions for review

T: What other factors might come in to a judge"s decision in order to sentence you to the full 25 years in Canada or something that would be less than 25 years. Mike?

S: The typical life sentence for 25 years in Canada would be like first degree murder but if were second degree murder it would have no premeditation – that could lower the sentence from 25 to 20 years.

T: Very good. Could someone else also continue on with that line of thought and give us a few more factors? Victoria?

S: Um, parole.

T: Could you expand upon that please?

S: Every so many years a prisoner can apply for a parole.

Text on screen: Open Questions

T: Should everyone serve their sentence in the same institution...Danielle?

S: I think that everybody, like if you do a murder or if you do shoplifting, and you then serve them consecutively, you can"t be in like a really harsh prison for like shoplifting for whatever you stole. I think it should be separated because different people, even with like with Paul Bernardo, they have to keep him separate from the other prisoners because they will like hurt him if he gets out with them, so they should put separate institutions depending on the seriousness of the crime.

T: Jess.

S: I think it varies. Because if you have a lesser sentence and you are going to be released back into society, you don"t really want to lose the time of your life, so you can still get an education. You can still be able to apply for jobs. Say, if you were to be sentenced to a provincial prison versus if you"re convicted of multiple counts ofmurder and you pose that threat, you should be sentenced to a penitentiary because there"d be more of the same type of criminal in the penitentiary versus a provincial prison.

T: Anyone have an opposing point of view? Michael.

S: For one, it would probably cost too much money to have specific institutions for certain crimes and also I think everyone still knows that the crimes are still wrong so therefore they should all be in the same place anyway.

T: Anyone else to support that opinion? Anyone else to oppose that opinion? We'll start with you Matt.

S: By your logic Michael, everyone should be in the prison, so you"re saying people who have committed terrible violent crimes, involving murder, or other things, or bodily harm should be in the same league with people that have committed minor crimes. But do you really think that"s a good thing – a wise idea?

S: Well, currently there"s like provincial and federal, all those – there"s like three versions of institutions where people can go. I think the highest crime should go in the one but I don"t think they should be based on a bunch of categories because if you open a book of law there"s 800 different crimes at least for every single thing you could possibly think of. So I think that there should be certain degrees of separation but I don"t think that it should just be like certain people, everyone is separated based on just one crime thing.

T: Is it beneficial to our legal system to allow people who have been convicted to bring reasons why they should receive a lesser sentence? Michael?

S: No I don't, because a crime is still a crime. They should get the same sentence as anyone else who has done the same thing.

T: Anyone want to expand on that or add to that? Matt?

S: I think that no, because they"re giving excuses for why they"re doing something. It doesn"t change the fact that they still didit.

T: OK, good. Does anyone have a different opinion? Jacqueline?

S: I understand where you"re coming from, like yeah, a crime is a crime, but you do have to take into consideration the situation, how the crime was committed, and the things that the accused brings into the courtroom, like their family situation, like their job, like their past. I mean, if you"ve never done anything before, and you"ve never committed a crime ever before, and your crime isn"t something that proves that, then why should you have to go away for something so long?

T: Elise?

S: I agree with Jacqueline when it comes to first time offences, because if they haven"t committed a crime before, it could just be a mistake, and I believe that people do want to rehabilitate themselves, so if it is a first time offence you can"t let something like that define you or affect your life so much when you really do want to change, but if it is a repeat offence I think that is a different circumstance and that"s why this is I think just to bring in these factors because then the crown can also bring in the aggravating factors to show that this isn"t their first time doing this and they need a longer sentence or more severe punishment because they obviously didn"t learn the first time they committed it.

T: Good, Danielle?

S: Is this the lawyer's job because they want their conviction and their direction so they"re going to cue their person they"re representing to represent all the facts obviously to create some sympathy towards them so who"s to say that grey line as to which is true and which is not and which is exaggerated and which isn"t? So I don"t know, it"s really hard to say how to introduce it because you never know the exact truth behind the situation.

T: Any other questions about the Canadian or American sentencing? Danielle?

S: I was just wondering about the "dead time"? Is there any difference from Canada to the U.S.?

T: Alright, very good question. I'm going to postpone that one for a few moments so...I have an article that you're going to take a look at so...if we can wait for just a few minutes.

T: Any other questions? Jacqueline.

S: I was just wondering if they had concurrent sentencing in the U.S.?

T: Good question. What can you tell us about concurrent sentencing? What's your idea of what it is?

S: Well I know that in Canada if you"re sentenced for two crimes, you can serve your sentence for both at the same time. I just wasn"t sure if that was the case in the US or not.

T: OK, anyone know about what that situation might be in the United States? Jacqueline?

S: Don"t you serve the time for each individual crime, after each other, so you serve like, a certain amount of time for one crime and then after that then you"ll serve the time for the next crime?

T: So in the United States what might be a sentence that someone would receive if they committed multiple crimes?

S: Uh, life in prison.

T: Or?

S: Or a certain amount of years without parole.

T: Yes, anyone have any other opinions on it?

Note: Classroom segment ends. Teacher resumes speaking to colleagues.

T: Well, it is truly crucial to get beyond the "ask a question and get an answer". Once you got in mind what you want the students to find out and what they"re thinking and why, it changes how you ask the questions. I really focussed on using students" answers to explore their thinking and build their understanding. I was amazed at how much students responded to this strategy.

Text on screen: asking for clarification, expanding, asking for a rationale, affirming efforts, postponing, gathering, summarizing, analyzing

Narrator:

Now it's your turn. A variety of differentiated activities has been provided for you to help you refine your classroom practice. You'll find a list of annotated readings. There are examples of teachers' facilitated discussion and a viewing guide. You'll find an observation tool so you can invite a critical friend to observe your questioning and give you feedback. You can access these materials on the website.

Quote on screen: It is essential to use effective questioning techniques to elicit richer evidence of understanding. (Fisher and Frey, 2007)

Segment 5: Questioning – Engaging Students in the Conversation (7:41)

Text on screen: This segment focuses on the way teachers ask questions so that students are more fully engaged in classroom discourse – incorporating think time, providing opportunities to rehearse their answers individually or in small groups, and engaging all students in thinking about the answer.

Questioning enables teachers to explore students" thinking **while they are learning**, so that we can respond to their needs in a timely way. Effective questioning makes students" thinking visible so that we can find out what they know and what they still need to learn.

Quote on screen: If you can both listen to children and accept their answers not as things to be judged right or wrong but as pieces of information to reveal what the child is thinking, you will have taken a giant step to becoming a master teacher. (Easley and Zwoyer, 1975)

This video shows teachers engaged in professional learning about assessment for learning, and in particular, about effective questioning strategies to improve their students" learning.

In this segment, teachers use research-based questioning strategies to engage students in discussion to learn more about what students know and understand.

Text on screen: Think Time

Research tells us that teachers typically wait 1 second or less for students to start a reply. Similarly, after a student stops speaking, teachers begin their reaction or proffer the next question in less than 1 second. If teachers can increase the average length of think time to 3 seconds or more, there are pronounced improvements in student use of language and logic.

T1: One thing I'm wondering though, why did you wait so long before you let the students answer the questions?

T2: Well, I'm giving the kids a chance to think. They need time to digest the question, figure out what it means and then put together information that will help them to formulate their answer. For the right answer.

T: What other factor might come into a judge"s decision in order to sentence you to the full 25 years in Canada or something that would be less than 25 years?

Text on screen: 3:00

T: Mike?

S: Um, while a typical life sentence...

T1: I noticed that you also waited before you reacted to a student's response.

T2: That's right. You don't want to cut the student off too soon. This gives them the chance to add or modify their response and other students to get a chance to digest the answer and maybe develop their own points of view.

T: If you think of what sthe purpose of the Canadian Judicial System, what does Canada expect that everyone who goes in the system eventually will be able to do? Elise?

S: Rehabilitation

T: And what do you mean by rehabilitation?

T3: How much think time is enough?

T4: I was really surprised to learn that it's about 3 to 5 seconds. If we give kids that time, we're going to get kids that are more willing take risks, we're going to get deeper answers and we are also going to give them...maybe an opportunity to generate their own questions which I think is our overall goal.

T3: If it works, I'll try it. But 3 seconds seems like a long time of silence.

T4: It is but if you think about it, if you have an open ended or really provocative question that you really wanted them to work with, you may actually give them more time than that.

Text on screen: Creating a Safe Environment

T4: Another approach that you might want to try is the Think/Pair/Share strategy. In that instance you could pose your question, give them some time to think about what their answer might be and then ask them to turn and talk to an elbow partner. This gives them time to rehearse their answer, to practice that on another audience and often times you'll find that you'll get more of a response from the children when you give them that time to share or rehearse their ideas first.

T: Now, I want you to go back to your activity. I want you to think about other ways you recorded that we use water.

T: Let's turn and talk for a minute. I think it might help us activate our schema. How did your family use water?

S: We use water for washing our clothes.

S: We also use water to put in a water sprayer and spray it out in the spring time so we can have lots of fun.

S: Sometimes we use it to wash our dishes.

S: Sometimes we use a hose that actually has water to water the grass or to put out a fire.

Text on screen: "No Hands" Strategy

T1: I read about a strategy called "No Hands". The idea behind this strategy is that a teacher doesn"t ask anyone to volunteer an answer. Students are all expected to think about the answer. It is something you might want to go over with your students first though.

T: Now as we talk, I am going to be asking different people to answer my questions. So, what I would like you to do is just leave your hands down because I will call on you. OK? That means that we all have to be listening very carefully because you never know when you might want to respond to something that somebody else said.

Narrator:

Teachers need to be mindful of how students feel about participating in class. We need to differentiate instruction to accommodate different learning preferences. Some students prefer to participate orally in small groups or in pairs before they are asked to participate in a whole class situation. Others prefer only to participate in small groups. Another approach to risk free questioning is to allow students to pass, if a question has them stumped.

T1: Sometimes it so hard to tell a child they are wrong without discouraging them.

It's important to respect and acknowledge the student's response even if it's way off base. If it is a good response you may point out what was good about it. Teacher praise is a powerful motivator. However, praise must be sincere and specific to the learning goal. We need to see the value in wrong answers. They are a rich source of information about the student's thinking. With more exploration, you can understand the source of the misconception and help the student progress.

T4: Yes, you are right. We really want to encourage that future participation. We don't want to turn them off or scare them into not wanting to be part of it.

The classroom has to be a safe place where students will take risks. We know that there are students who lack confidence, who hesitate to speak up for fear of being wrong or who have been shut down by a negative reaction.

Now it's your turn. A variety of differentiated activities has been provided for you to help you refine your classroom practice. You'll find a list of annotated readings. There are examples of teacher-facilitated discussion and a viewing guide. You'll find an observation tool so you can invite a "critical friend" to observe your questioning and give you feedback. You can access these materials on the website.

Quote on screen: Fewer questions, better questions and time to think. (Morgan and Saxton 1994)

Segment 6: Questioning – What We've Learned (8:37)

Text on screen: Teachers share their experiences – both successes and challenges – as they continue to look for ways to improve oral questioning.

Narrator:

Questioning enables teachers to explore students" thinking **while they are learning**, so that we can respond to their needs in a timely way. Effective questioning makes students" thinking visible so that we can find out what they know and what they still need to learn.

Quote on screen: Questioning generates the kind of talk and communication which can lead to learning. (Morgan and Saxton)

This video shows teachers engaged in professional learning about assessment **for** learning and in particular about using effective questioning strategies to improve their students" learning.

As part of their learning, teachers act as each other so coaches and critical friends, inviting their colleagues to observe their teaching and to provide focussed feedback.

In this segment, we listen in as teachers meet to debrief their experiences and share their observations.

Text on screen: Effective Questioning

- Planning questions in advance
- Exploring and expanding student responses
- Accessing student thinking
- Enhancing student engagement
- Planning questions in advance

T1: We put a lot of thought at the front end of our unit into developing those questions. I think they gave us a deeper understanding on what we're trying to look for and the road we want to travel with these kids.

T2: I think so, too. I think that planning our questions in advance really helped us to let our instruction follow the right path.

T1: I think what"s interesting is when you are doing a lesson like that is how much assessment for learning you"re doing as you"re thinking on your feet. You see the direction the kids are going. You see the kids who are coming along with you. You see the kids that maybe we need to go back. You see the misconceptions that sometimes come out.

T2: They don't think of water as a solid. They don't think of it as a gas.

T1: You"re absolutely right because when we came to that point in the lesson that took a lot of probing and questioning to make that connection for the kids.

T2: So as we go through this topic on air and water, one of the things that we are going to think about is, when we get to the water cycle, that they think the water stays a liquid.

Text on screen: Exploring and expanding student responses

T3: When students were giving you responses, you were taking those responses and you were allowing the other students to elaborate on them, clarify and add more opinion rather than I think what is very typical, often the teacher takes that response and then does the elaborating themselves. So, you eliminated a lot of teacher talk and you allowed more of the students to be heard.

T4: There's a real value in having the students share the information, and also have the opportunity without any fear of providing a wrong answer that they can express their opinions. There is a huge value in having the students be the one that's carrying on the conversations and the guestions and not simply me.

T3: I made another observation as well. What about when a student gives an incorrect answer and I found it a few times I know the answer that you re looking for but you weren t necessarily getting it. And what you did was you used postponing technique and you decided to ask other students and then you went back to the original student. And that student was given the time to adjust the response.

T4: I think we all get put in situations where we're put on the spot. We have to answer questions very quickly and if we're given some think time to provide an answer that would really benefit us.

Text on screen: Accessing student thinking

T3: What do you think that the students were learning? Were they learning?

T4: We handed out exit cards at the end of the lesson. I was looking to... I realized that what I was looking for them to get the differences between the Canadian and American sentencing. They provided an answer as to which one they supported and why. They also have provided me with some examples of what I could do the next time.

T3: You did point out that you were worried that some of the kids that were not participating – how can you assess whether or not they are learning, but by putting them in group situations from time to time, or just asking them to talk to each other, I saw that you went around and you were able to assess at that point.

Text on screen: Enhancing student engagement

T3: I noticed the think time that was being used as a strategy – I was watching as you were asking questions and the more you waited, the longer you waited, more and more hands started to come up.

T4: I find that to be the most difficult, the biggest challenge that I had when I was doing the questioning. You really have to wait for a few moments and almost count to yourself. It was interesting as the class went on and they began to see the value of the think time as well. That from 1 or 2 hands, it got to 5 and 10 hands, and that way, as you say, you"re not picking the same person time and time again.

T2: I always thought I did use think time but I realize now that my think time was not long enough. Think time should be at least 3 seconds after I ask the question before I ask a student to respond. And that been a little difficult. The think time that we should use after a child responds has also been a bit of a learning curve for me. We should really wait after a child responds; we should wait at least 3 seconds before adding anything else ourselves or before asking another student to give this child time to add anything onto his answer or to finish his sentence.

T1: The kids are a little uncomfortable because I am asking them to go deeper. It's pushing them into those higher level thinking skills and those broader ideas that we want them to try.

T2: I know that I have a bad habit of jumping in and finishing their sentence for them. Turn to your partner and talk – I am not sure what you called it in your classroom. In my classroom, you say, you know, "turn to your elbow partner and talk" – is one of the best strategies for getting the entire class involved in discussing the topic so that when we do ask the questions, they"ve all thought it over already and are much more able to answer.

T1: It also activates their prior knowledge, gives them time to rehearse what they want to say and pick up something that they may make a connection with that somebody else said.

Narrator:

Our students reap many benefits when we are open to improving our assessment practices. When we change the way we ask questions to focus on our students" conceptual understanding – to make students" thinking visible to us – we gain information that helps us to identify misconceptions, close gaps in learning and make instructional decisions that help our students learn. As well, we build relationships and create environments in our classrooms that motivate deeper thinking and engage students in their learning.

Now it's your turn. On the website there is a variety of supports. For example, you'll find a list of annotated readings. There is also a classroom observation checklist you can use with a critical friend. You can access these materials on the website

Quote on screen: If you can both listen to children and accept their answers not as things to be judged right or wrong but as pieces of information to reveal what the child is thinking, you will have taken a giant step to becoming a master teacher. (Easley and Zwoyer, 1975)