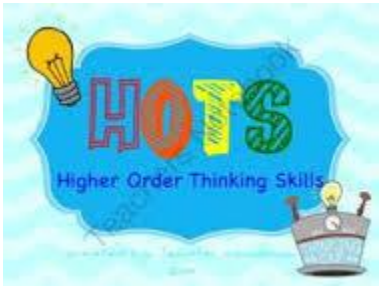
DOMAINS 2 & 3

EFFECTIVE QUESTIONING

Part 1: The Why of Questioning

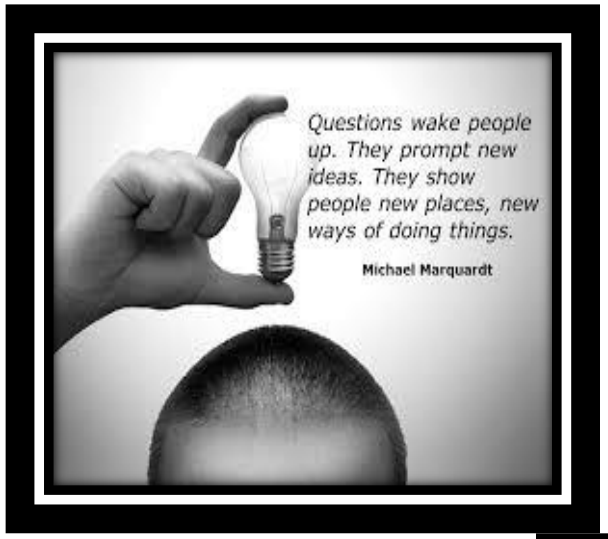
Darlyne de Haan, Supervisor of Instruction
(Math, Science and Technology)

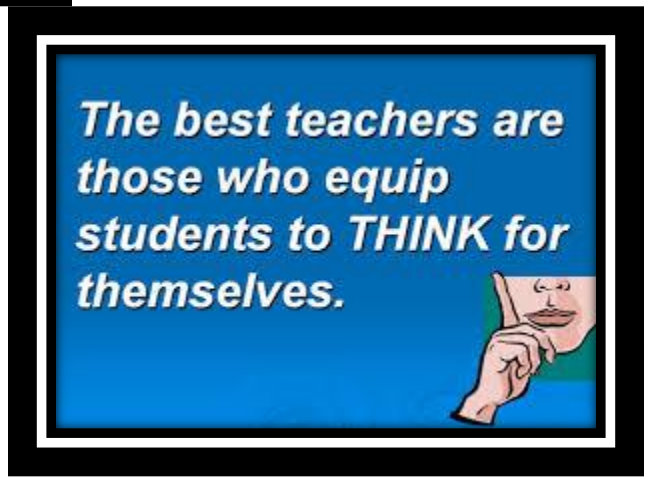
WELCOME



THE TAIL OF THE SNAILS

Questioning in the Classroom





Objectives

- Identify and apply discussion and questioning techniques in practice
- Recognize and integrate strategies for increasing student engagement in practice
- Self-assess and develop action steps for implementation

To discover the **long term** benefits of questioning and why questioning is not a waste of time!

Agenda

- Overview of questioning and discussion techniques
- Questioning activities and debrief
- Overview of student engagement techniques
- Student engagement activity and debrief
- Complexity vs. Difficulty…There is a difference!

Norms and Materials

Norms

- Be engaged, attentive, and respectful

Materials

- Utilize the supporting materials
  - Electronic versions of all materials are available on Google Drive, under Professional Development

1 Minute Question Challenge!

In your group, write as many higher order questions as you can about the story Goldilocks and the Three Bears!

GROUP WORK

Discuss with your group why it is crucial to ask students higher order thinking questions.

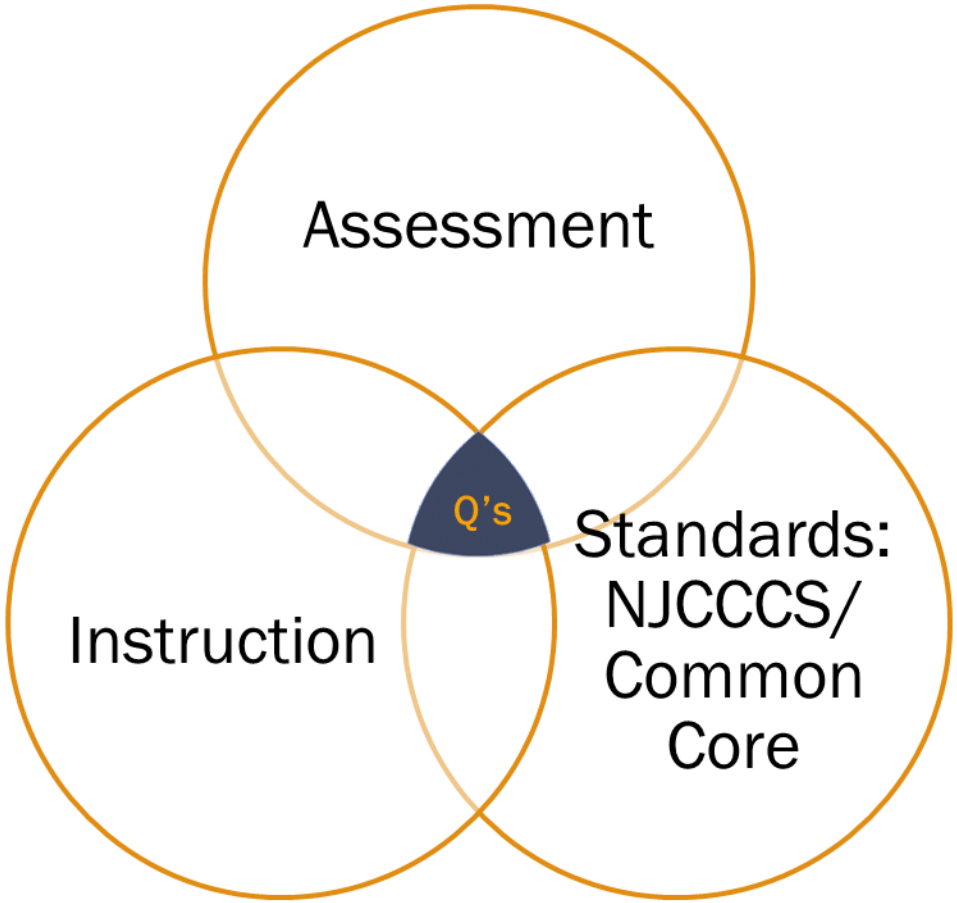
Be prepared to share out.

Possible responses…

- By providing them with high order thinking words it encourages them to dig deeper into the topic. It Helps them **own** their thinking.
- The goal of EFFECTIVE QUESTIONS is to get the students to have a reaction "**inside**" to promote discussion, thinking, and writing "**outside**".

QUESTIONING CONNECTS

Effective questioning allows educators to connect the main elements of their practice.



Questioning and discussion are essential elements of all state-approved teacher practice instruments.

Danielson	Marshall	Marzano	McREL	Stronge
3b	A-c,d,g C-c,g,h D-c	Domain 1: DQ 2,3,4,5	Standard IV	Performance Standard 2,3,4

STRATEGIES
FOR QUESTIONING

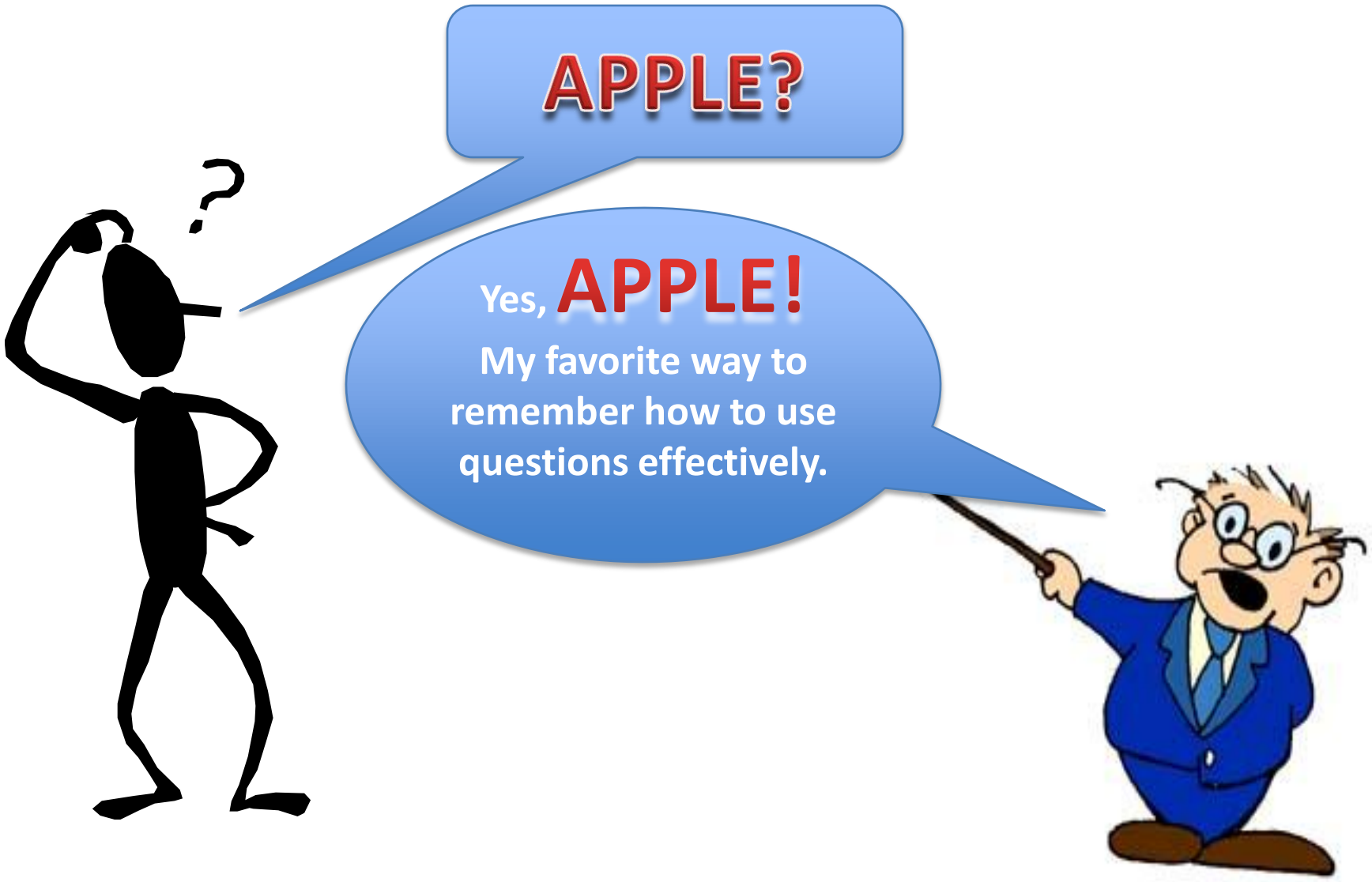
Strategy	Description	Application
Demonstrate listening	**Show students you are interested in their response.** Initial responses maybe fragmented or disjointed as students grapple to clarify their ideas.	Use non-verbal signals such as facial expressions, a nod, eye contact, sitting forward
Sustain the question	**Use probes** that encourage the clarification, extension or elaboration of a response. Encourage a range of responses to the one question.	Does anyone ha a different opinion? Could you tell us a little more about that idea? Can you provide some evidence to support your point of view?
Allow wait time worksheet	**Learn to be comfortable with the silences**, so that wait time is extended. Tell students why you are waiting	Use affirmative non-verbal 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.	That's an interesting view. Yes, that's one way. Can anyone add to that? Thank you for that idea.
Vacate the floor	**Redirect student responses or comments**. Breaking the sequence makes students aware that talk doesn't always have to be directed through the teacher. This encourages student dialogue.	Would any one like to respond to that idea? What can you add to that response? How consistent is this response with your thinking?

Provide Ample Wait Time

The research found that the higher-quality answers and discussion that occur from longer wait time increase understanding in the subject, thereby eliminating a significant number of follow-up questions from both teachers and students. So, although it might go against the teacher's intuition to spend the extra time waiting for an answer to a question, it actually makes the lesson more efficient and effective, which is certainly worth it.

Questioning Techniques

- Encourage students to ask questions at any time.
- Give adequate consideration to all questions--never evade a question.
- Scatter questions over the entire class.
- Use "**APPLE**".


APPLE?
Yes, APPLE!
My favorite way to remember how to use questions effectively.

Questioning Techniques

"APPLE"

- ***A****sk the Question*: Questions should be prepared in your lesson plan in advance.
- ***P****ause*: Let the learners think about what you are asking. Give the learners 3-5 seconds in order to respond.

Questioning Techniques

"APPLE"

- ***P****ick*: Pick on a learner by name to answer the question. Do not always pick on the first learner that raised his hand. You may also pick on someone that hasn't raised his hand in order to force participation.

Questioning Techniques

"APPLE"

- ***L****isten*: Listen to the answer, make eye contact with the learner, provide effect words* when the answer is provided. Mix your effect words, nothing sounds more phony than an instructor that always says "very good" whenever a learner answers a question.

*Praise and/or encouragement words

Questioning Techniques

"APPLE"

- ***E****xpound and Explain the learner's answer*. Generate a dialog based on the learner's response. If the learner's response was incorrect, redirect the question back to the other learners. "That's an interesting response, but not the one I was looking for, can anyone else provide a different answer?"

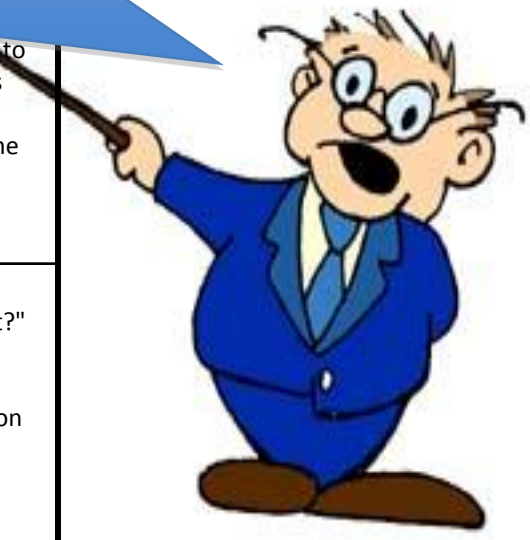
Questioning Techniques

Remember, there are many different types of questions. BUT…..

The response and outcome the teacher wants dictates the type of question the teacher should utilize.

Response Wanted:	Outcome Wanted:	Type Questions Utilized:
Factual Recall	Use this type of question when you want the learner to state specific information	"What is the distance of the Moon from the Earth?" The question is straight and to the point.
Interest-Arousing	This a…	…o the Moon from the …be away from …e of question …it arouses
Canvassing		…?" …the …dn't
Thought-Provoking:	…to get cogniti… higher learni…	…to travel to ge… to …s?" This question asks …ics, while still obtaining the …ctual recall question of the distance to the Moon.
Leading:	• A leading question leads the learners into the answer • Instructors need to be careful when using these questions. They are best suited with a follow up question such as…	• "The Moon isn't too far for space travel based on current technological trends, is it?" The learner can assume the answer is no based on the wording of the question. • "Was the Moon considered to far based on 1966 technological abilities?"

Take a look at this chart. What kind of response do you want? Knowing what you want to achieve through questioning is what makes your questions effective. This is why it is so important to plan for questioning.



Response Wanted:	Outcome Wanted:	Type Questions Utilized:
Factual Recall	Use this type of question when you want the learner to state specific information	"What is the distance of the Moon from the Earth?" The question is straight and to the point.
Interest-Arousing	This a good type of question to get learners back into the topic. Maybe the learners have drifted off and interest in the subject is not want the instructor wants it to be.	"If you were to going to the Moon from the Earth, how long would you be away from home?" The wording of this type of question makes it personal to the learners, it arouses their interest.
Canvassing	A canvassing question is a good way to put a question out to the whole class and encourage discussion amongst the learners.	"How many of you would go to the Moon?" • To hand raised: “Billy, I didn’t think you liked to fly. Why would you want to go to the moon?” • To Hand not raised: “Mary, I see you didn’t raise your hand. Why?
Thought-Provoking:	This type of question generally asks a higher cognitive domain question that encourages higher learning.	"How fast would one need to travel to get to the Moon in two days?" This question asks math and physics, while still obtaining the factual recall question of the distance to the Moon.
Leading:	• A leading question leads the learners into the answer • Instructors need to be careful when using these questions. They are best suited with a follow up question such as…	• "The Moon isn't too far for space travel based on current technological trends, is it?" The learner can assume the answer is no based on the wording of the question. • "Was the Moon considered to far based on 1966 technological abilities?"

Open-Ended Questioning

Questioning Techniques

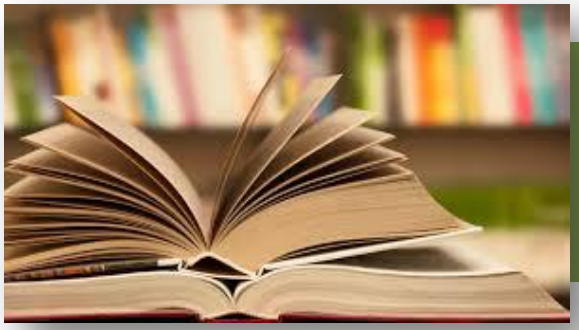
- Do **not** permit frequent group responses.
- Ask open-ended questions
- Avoid asking questions that can be answered by guessing by using key words of questioning--*how, why, when, where, what, which.*

Open-Ended Questioning

You can promote open-ended questions by using a **Question Matrix**

Question Matrix

	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?



Matrix Activity!

With your group, read the information/problem found at your station aloud. After reading it, each person using the **number on their envelope, which matches the number on the GREEN** Matrix chart, must finish the question of that number. The rest of the members in your group must answer the question.

Overview: Questioning Techniques

- Have students speak loudly so that all may hear.
- Keep questions on the subject.
- Write questions in your lesson plan.
- **Pose questions within the ability of the student to whom the question is addressed.**
- **Ask questions of the inattentive.**
- **Require students to give complete answers.**
- Use spontaneous questions. Planning is essential to effective questioning, **but** by listening carefully to student responses sometimes spontaneous questions can be very effective.

Grade/Subject: 8th Grade/Exploring Business Technologies
Objective: Interpret supply and demand graphs

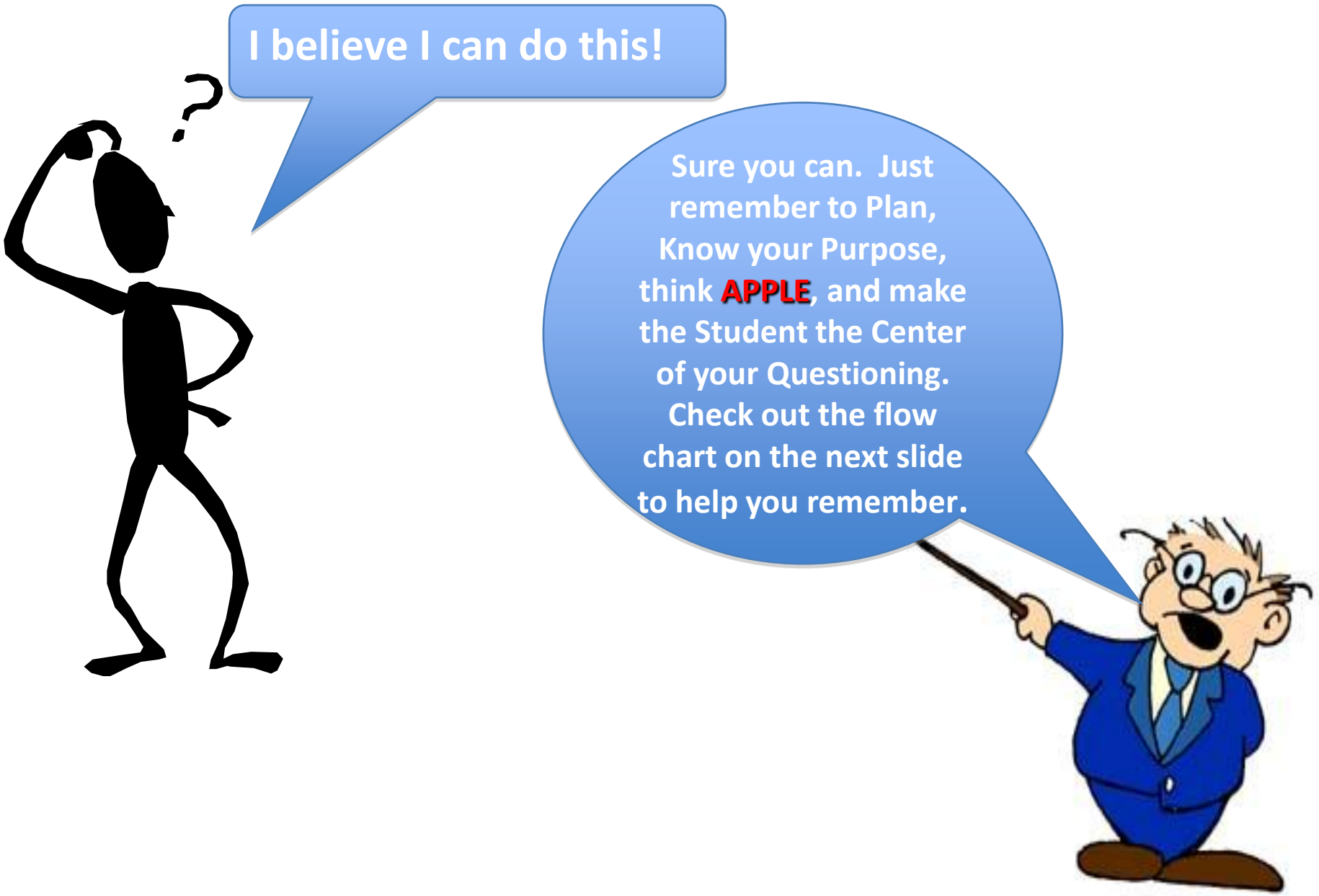
Learning Target	Criteria for Success	Questions	Re[illegible]
I can discuss how supply and demand are related and how they affect the price of goods.	I will communicate how supply and demand are affected as the price of goods change. (increase, decrease, or stay the same).		
I can find and interpret the market price and quantity exchange on a supply and demand graph.	I will develop a supply and demand graph and interpret the market price and the quantity exchanged on the graph. I will interpret the supply and [illegible]mand graphs in the Changing Price of [illegible]rn activity by locating the m[illegible]rket pri[illegible]on the accompanying gr[illegible]s and discussing th[illegible]ffec[illegible] supply and dema[illegible]or[illegible]e p[illegible]ce of corn.		
I can interpret supply and [illegible]mand graphs for vari[illegible]s si[illegible]tions	I will [illegible]entify the relationship between supply and demand and the cost of the product.		

What misconceptions do you think students might have?
What will you do to address the misconceptions to move learning forward (e.g., how will you adjust instruction, what descriptive feedback will you provide)?

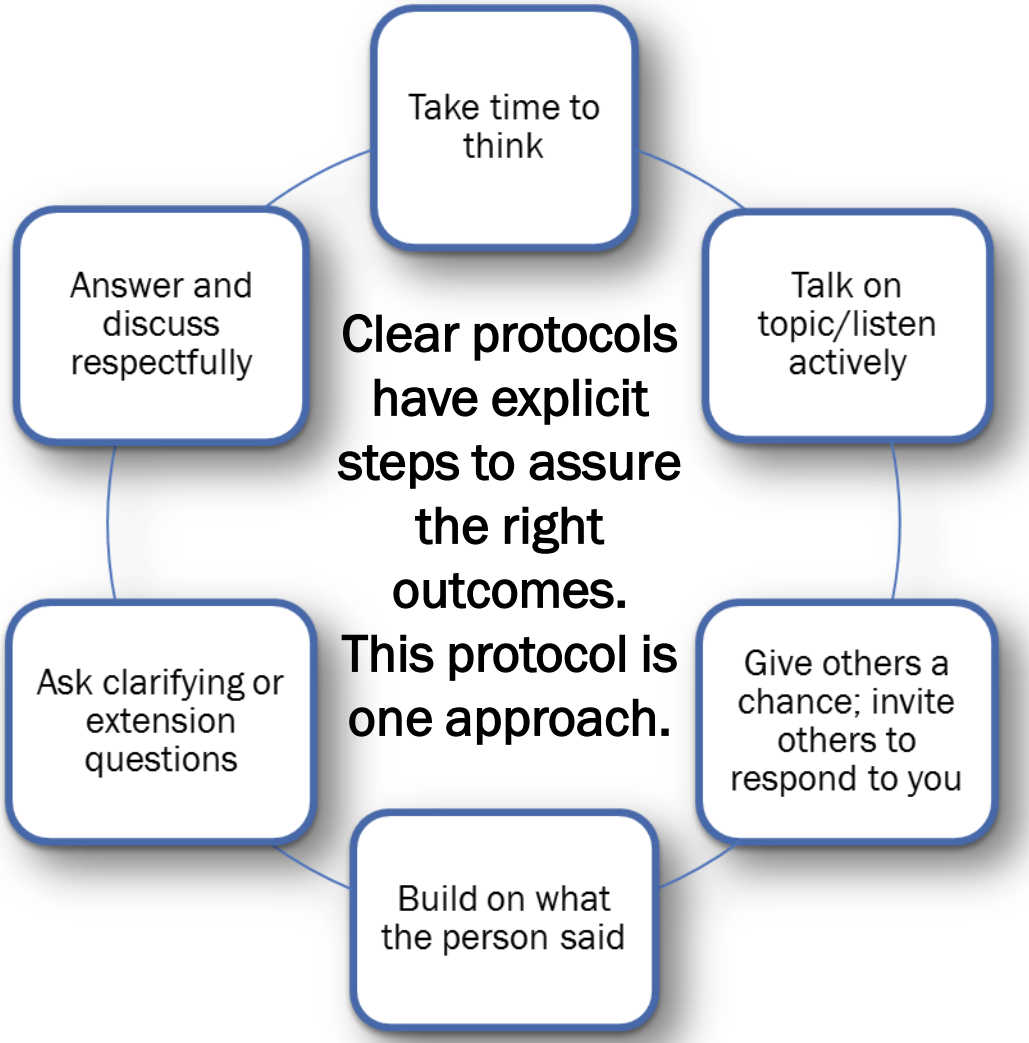
IMPORTANT POINTS TO REMEMBER:

- Questioning is not about what the teacher knows, but about what the **student knows** . . .
- **NEVER** answer your own questions! If the students know you will give them the answers after a few seconds of silence anyway, what is their incentive to answer?
- Make it about them . . . NOT about you.

How do I ask effective questions?



OVERVIEW

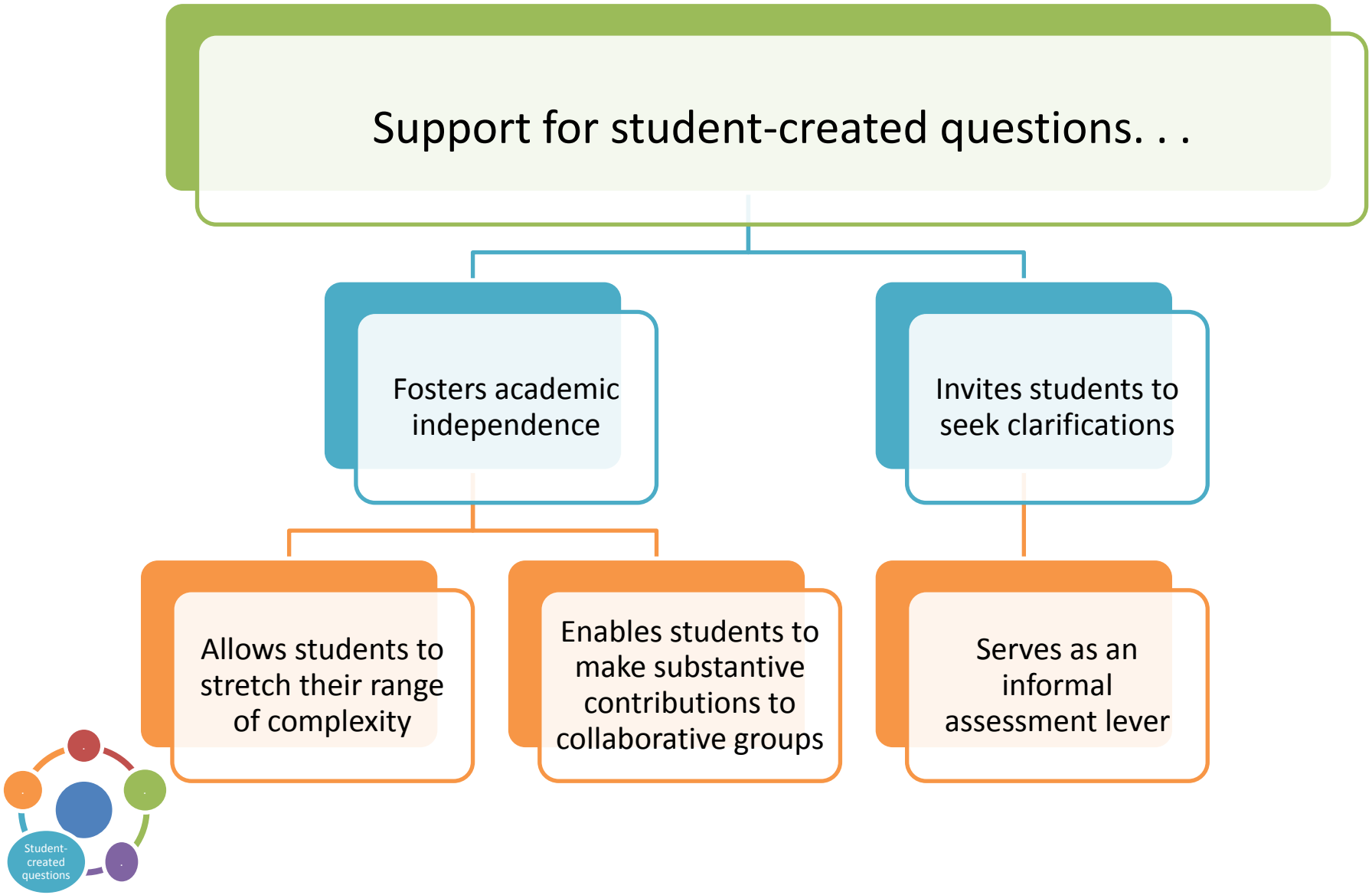

Take time to think
Talk on topic/listen actively
Give others a chance; invite others to respond to you
Build on what the person said
Ask clarifying or extension questions
Answer and discuss respectfully
Clear protocols have explicit steps to assure the right outcomes. This protocol is one approach.

Effective Questioning

Part 2

How to Empower Students Student Engagement

Foster Student-Created Questions

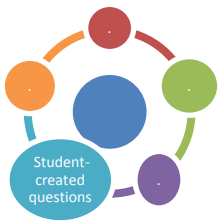


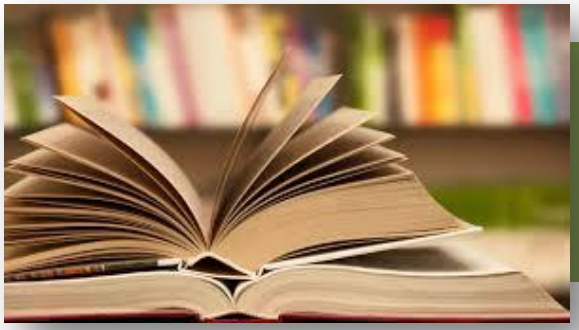
Resources for Student-Created Questions

Instructions

- Watch how Ms. Francisco utilizes resources to enable her students to create higher order questions:
- Developing Better Questions Video

Ms. Francisco's Resources:
Bloom's Taxonomy Verb Starters
Costa's Levels of Questioning
The Frayer Model





Verb Starter Activity!

Using the same book that you read as a group earlier, you are going to use the Verb Starters and/or Costa's Level of Questioning and create questions as if you were the students to present to your group.

Allow All Students to Access/Respond to Questions

Sample Strategies that Allow All Students to Participate:

- Turn and Talk
- Think-Pair-Share
  - Think-Pair-Square
  - Think-Square-Share
- Voting
- Ranking
  - (see pg. #24)
- Slate/Whiteboard answers
- Costa's Blackjack

GROUP ACTIVITY

Turn and Talk how this concept of levels of questions could be used in all your classes.

1 Minute Question Challenge revisited!

In your group this time using Costa's Level of Questioning, create higher order questions about the story Goldilocks. Compare it to the questions you created at the beginning of the workshop!

Which level was your original question?

Review-Revisit-Respond

Review the question you created for your groups picture

Revisit the keys for questioning

Respond: What level, according to Costa is your question?

Use The Sticky-Notes to write your answer as an exit-ticket. ☺

Along with rigor, education is calling for us educators to increase the complexity in the questions we pose, the problems we present, and the tasks we provide to our students. We educators are told we need to work our students smarter, not harder in order for them to develop the deeper knowledge, understanding, and awareness of what they are learning. Erik M. MAVERIK EDUCATION LLC,

http://maverikeducation.blogspot.com/2014/03/difficulty-vs-complexity-whats.html

Summarizing Workshop: 3-2-1

- **Write: 3 things you learned today.**
- **2 things you plan to use**
- **1 thing you really liked**

Fill out the district survey on the Drive to get your certificate.

2014-2015 prof development evaluations