QUESTIONING & CREATING STUDENT DISCOURSE

Quotes

"Quality is not an act, is a habit."

-- Aristotle

"Change your language and you change your thoughts."

-- Karl Albrecht

"The best questions are challenging and involve understanding and using of basic concepts rather than memorization."

--Carl Wieman, Nobel Prize in Physics 2001 is a professor at Stanford University's Graduate School of Education.

To help students build confidence and rely	on
their own understanding, ask	

- Why is that true?
- How did you reach that conclusion?
- Does _____(it) make sense?
- Can you make a model to show that?
- How can you relate to _____(it)?

To help students learn to reason mathematically, ask...

- Is that true for all cases? Explain.
- Can you think of a counterexample?
- How would you prove that?
- What assumptions are you making?

To check student progress, ask...

- Can you explain what you have done so far?
- What else is there to do?
- Why did you decide to use this method?
- Can you think of another method that might have worked?
- Is there a more efficient strategy?
- What do you notice when...?
- Why did you decide to organize your results like that?
- Do you think this would work with other numbers?
- Have you thought of all the possibilities?
- How can you be sure?



 To help students collectively make sense of topic/goal, ask What do you think about what said? Do you agree? Why or why not? 	
• Does anyone have a different way to explain (the)?)
• Do you understand what is saying?	
• Can you convince the rest that (your answer/statement) makes	
sense?	
To encourage conjecturing, ask	
 What would happen if? What if not? 	
 Do you see a pattern? Can you explain the pattern 	า? 🍑
What are some possibilities here?	
 Can you predict the next one(s)? 	
What about the last one?	
 What decision do you think he/she should make? 	

To promote problem solving, or perseverance, and critical thinking ask...

- What do you need to find out?
- What information do you have?
- What strategies are you going to use?
- Will you do it mentally? or use pencil and paper?
- What tools will you need?
- Using a number line?or sketch of situation, timeline of story?
 Diagram? Another tool ? Web/Apps. ?
- Will a calculator help? Glossary? Index? Search?
- What do you think the answer or result will be?
- Is there a pattern/formula/concept/thesis involved?
- What support/evidence/facts/info do you have?

To help when students who are "stuck" ask...

- How would you describe the _____ (task/problem/story) in your own words?
- What do you know that is not stated in the task/problem/story?
- What information do you have?
- How did you tackle similar problems?
- Could you try it with a simpler task/problem/story?
- Can you provide a simpler task/problem/story?
- What about putting things in order?
- Would it help to create a diagram? Make a table? Draw a picture?
- Can you guess and check? [Math. Science]
- Have you compared your work with anyone else?
- What did other members of your group try?



To make connections among ideas and applications, a • How does this relate to…?	ısk
 What ideas we have learned before are useful for (this) _ 	?
 Can you give me an example of? What are similarities and differences with How can (this) be used or related to real 	_ (prior concept)? life?
 To encourage reflection, ask How did you get your answer statement? Why is your answer reasonable? Can you describe your method? Can you explain why it works/makes sense/persuades? What if you had started with rather than? What if you could only (use)? What have you learned or found out today? Did you use or learn any new words today? What did they mean? How do you spell them? What are the key points or big ideas (in this lesson/story)? 	

STUDENT DIALOGUE

WHAT is it? Dialogue is a special kind of conversation that brings out the inner wisdom of both the individuals who participate and the collective thinking of the group. Dialogue is not a rehearsed speech; it is spontaneous, seeking new ideas that are created in the moment.

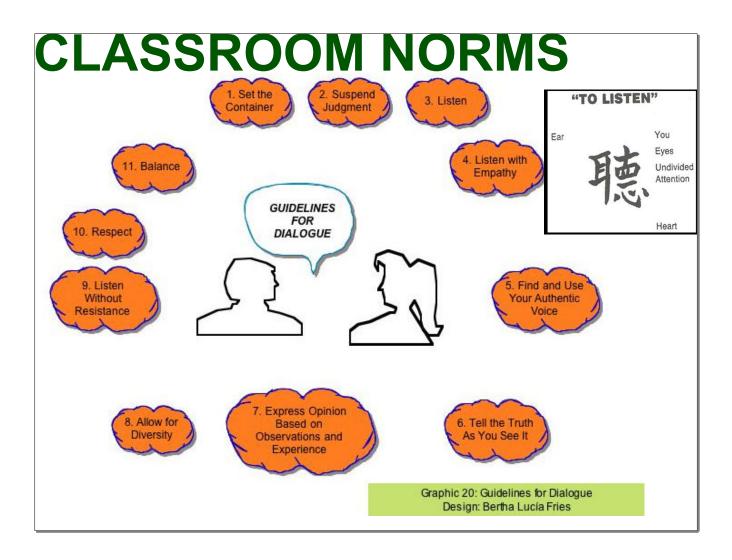
WHO is it for? Dialogue is for those who want to develop and value the art of thinking together or a group that wants to explore what might emerge through extended dialogue together. It can be used in many kinds of setting including work and business environments. Dialogue is dependent on empathy and through this opens perspectives and ideas to higher levels.

WHY use this method? In making our thinking process visible we help others understand where we're coming from and give them the opportunity to help us clarify our thinking. When assumptions are revealed we become more aware of them, what they are based on and can check out their validity. By making our beliefs overt we can observe them more clearly and by relating them to our thinking process determine whether these should be cherished or trashed. Beliefs include our attitudes, deep feelings and convictions. All this makes up our individual contribution to the shared meaning that emerges or unfolds with the dialogue group from the larger pattern

Types:

- + Expressing Opinion
- + Clarification
- + Soliciting Response
- + Individual Reporting
- + Disagreeing
- + Affirming
- + Advocating

- + Predicting
- + Paraphrasing
- + Acknowledging Ideas
- + Partner/Group Reporting
 - + Suggestion
 - + Holding the floor
 - + Agreement





EXPRESSING OPINION

I think/believe that ... It seems to me that ... In my opinion ...

PREDICTING

I guess/predict/imagine that ... Based on ... , I infer that ... I hypothesize that ...

ASKING CLARIFICATION

What do you mean by?	
Can you explain again please?	
Can you clarify what you said earlier please	about?
I have a question on what you said about	?

PARAPHRASING

So what you are saying is that ...
In other words, what you think ...
What I hear you are saying is that ...
Let me paraphrase what you are saying ...
To put it in my perspective, what you mean is ...

SOLICIT A RESPONSE		
What do you think about?		
I have not heard from (name of res		. 1 4 .
can you tell me how y	0	as to
what was the answer	you obtained?	A COM TOL
ACKNOWLEDGING IDEAS/ADVO		
My ideas are similar to		Sharpen Your Skills
My hypothesis is related to	because of	Sharpen your skins
I agree with because		
I want to advocate for	_'s idea because	•••
PARTNER/GROUP REPORTING We decided that because (this, Our conjecture is because of (this Our conclusion is that because (the We hypothesized that because (the We had a different approach. What (this, this, and that)	s, this, and th nis, this, and t is, this, and tl	at) that) hat)

INDIVIDUAL REPORT	
I read that, and then, so in sun	nmary
The information I gathered in (topic	assigned) was
The evidence I noticed in (source exa	mined) was
My report in (topic assigned) will inc	,
The research I made on (topic assigned	
INDIVIDUAL REPORT FROM HUMA shared with me that pointed out to me that emphasized that indicated that	AN SOURCE
HOLDING THE FLOOR	=

As I was saying about (topic), is that ...

If I could finish my thought on (topic), is that ... What I was trying to say about (topic), is that ...

OFFERING SUGGESTION

Here is something we can try on (topic), because ... Perhaps we could also on (topic), because ... What if we ..., because of (this..., this..., and that)

DISAGREEING

I do not agree with you, because of (this..., this..., and that) I got a different answer than you, because ...

My hypothesis is different than yours, because what I see is (this..., this..., and that)

My conclusion does not concur with yours, since I found that ... My thesis about (topic) is instead ..., because I feel that ...

AFFIRMING/AGREEMENT/ADVOCACY

That is an interesting idea, I like the fact that ...

I had not thought about that, I can see why... (this... and that ...)

I support what you mean, when you said ... because ...

Your conjecture makes sense, because now I see that ...

I agree with your statement/opinion/report, because of (this..., this..., and that)

I concur with you on ... , because I also think that

Discussion Placemat

This discussion placemat has multiple uses. The demand of discussion appears both in oral discussion and in writing. These stems provide help in extending thinking and

asking for clarification.



Evidence

What facts or statistics prove your point that...

What real world examples prove your point that...

Where in the text does it support your point that

What else have you read or seen that gives support for...

Additions

How can we add to this idea?

What are some other examples related to this?

What else could support this idea?

What contradicts or disputes this idea?

I would add..

Building on that idea...

That idea connects to...

On the other hand...

An even better example might be...

Clarify

Is that point made clearly?

Can I restate what you said about...?

Why this makes make sense to others...?

Let me see if I understood you correctly.

To paraphrase what you just said...

In other words, what you are saying is...

What I understood was...

Specifics

What are some words or phrases that point to that idea?

Can you show me where it says that?
Why do you think the author states that?

Can you be more specific?

For example...

In the text it says...

One example that illustrates that is

The author describes in detail...

Elaboration

Can you elaborate...?

What do you mean by..?

How does that example support...?

Can you give more examples...?

I think it means...

I Think it means.

In other words...

It is important because...

To state the point another way...

Another example might be...

Disagreement

Is that relevant?

Can you show me more evidence?

Does that evidence apply to this situation?

Can you justify that for me?

I don't agree because...

I don't see your point because...

That seems unfair because....

I don't think your evidence supports your

claim because...

Questioning+DiscussionStems_	PD	Slides
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Content References

The contents on questioning techniques were developed under a grant from the U.S. Department of Education. However, the contents do not necessarily represent the policy of the U.S. Department of Education, and you should not assume endorsement by the federal government. **PBS TeacherLine**

Delivering professional development online

www.pbs.org/teacherline

The contents on what, who, and why of dialogue were obtained from

http://cct.wikispaces.umb.edu/Dialogue

The contents on language strategy STEMS were adapted from SUHSD/OLA by Dr. Kinsella Narrowing the Language Gap

The Discussion Placemat is Adapted from Zwiers and Crawford: *Academic Conversations*