#### Presentation Workshop for Future Scientists

at Princess Chulabhorn Science High School Mukdahan, June 11, 2018

#### **Questioning & Answering**

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#### Why Ask Questions?

You ask questions:

to learn more

to discuss

to be polite

You create questions.

## Creating Questions Cubing



Describe	How does it look? What do you see from size, shape, weight, surface, inside,	
Compare Contrast	Is there anything similar or different?	in the same kind / group in different kinds / groups
Associate	Can you connect it to something else?	anything that comes into your mind
Analyze	Can you divide it into smaller elements? Can you combine them into a larger unit?	classification, integration, relationships
Apply	What can you use it for? Is there any other way to use it?	in everyday situations, in academic contexts
Argue	What is your opinion about it?	agreement, disagreement, different points of view

## Creating Questions Cubing (examples)



Describe	Where are the body clocks? / How large are they? How do they look? / Does it look like this clock?	
Compare Contrast	How about someone who works night shift? Is there any study that says the same/opposite thing?	
Associate	Do body clocks have alarms?	
Analyze	What is the mechanism of body clocks? What of our body do they actually control?	
Apply	Can we reset our body clocks? Can we lead a healthier life if we follow our body clocks?	
Argue	I don't think we should say everyone must have the same settings of their body clocks. What do you think?	

## Answering The TRAC procedure

Thank		Thank you for your question. Thank you for asking that. That's what matters here. Actually it is not easy to answer that question.
Repeat		Your question is, right? You are asking about, right? What you mean is, right? Let me rephrase your question like this. ""
Answer	Basis	In principle, In the first place, As everyone knows,, The bottom line of my study is that
	Core	The most important thing here is Let me emphasize this. ""
Check		Does this answer your question? Am I clear?

#### **Answering**

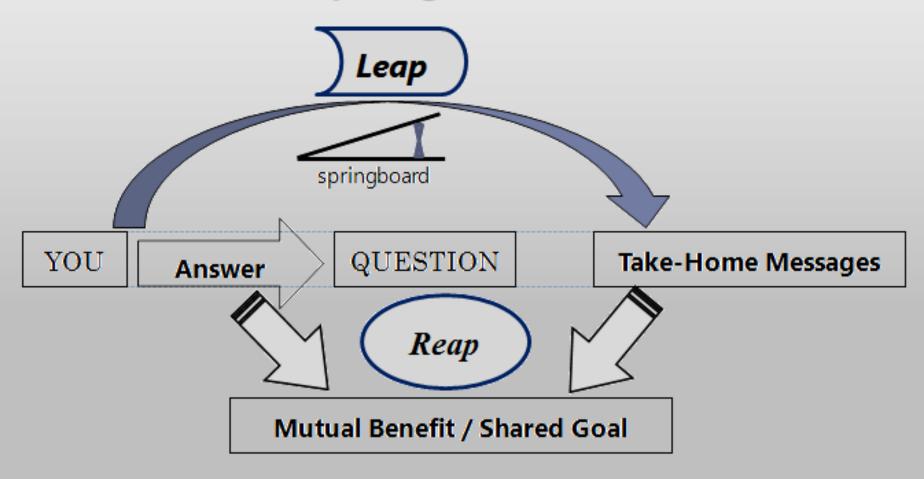
When you receive a question:

If you have a good answer to it,

Just give it.

If you don't,

Leap over it.

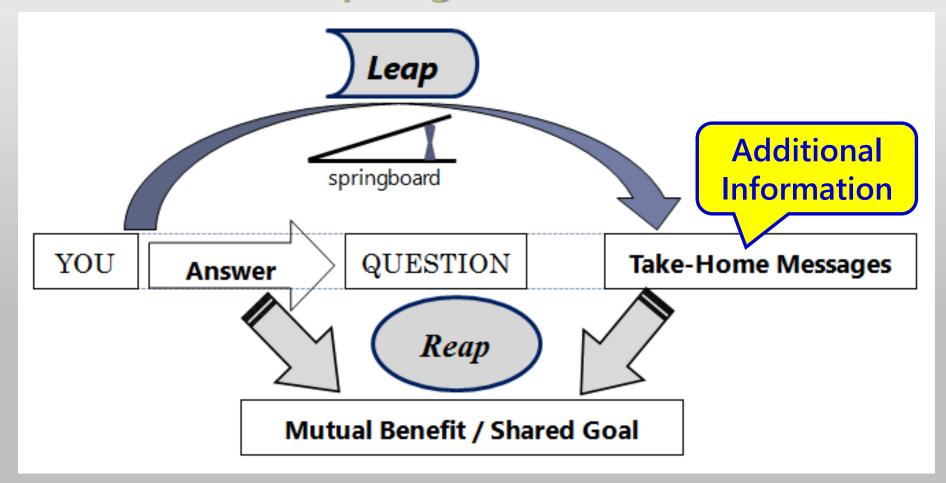


- Q. How many body clocks does a human have?
- A. I'm sorry I don't have the exact number.

But I would like to stress that the body clocks work separately from each other. In other words, they are independent. Many people think everything in our body is controlled by our brain in a uniform way, but actually it is not true. Our body is made up of different, independent parts. It is more complex than generally believed. Don't you think it's interesting?

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<u>LEAP</u> over the question to <u>REAP</u> the most from it!

#### Why Ask Questions?

You ask questions:

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to be polite

Why is the questioner asking the question?

- 1) To learn more
  - Give accurate, specific, detailed information.
  - Give background information.
- 2) To discuss / To teach you something
  - Be respectful and open your ears.
  - Give your own idea if you have one.
  - Impress your audience with what you want to stress.
- 3) To be polite
  - Give any additional information you can offer

#### 1) The Key Word Technique

- > Listen to the question carefully.
- > Pick out 1-2 key words to focus on.
- > Say something related to the key words, especially what you want to stress about your study or "take-home messages" of the presentation.
- Q: You said the cycle of light and dark controls the body clocks. But people who work until late at night receive too much light and the balance of light and dark is lost. What happens then?

- 1) The Key Word Technique
- Q: You said the cycle of light and dark controls the body clocks. But people who work until late at night receive too much light and the balance of light and dark is lost. What happens then?
- A: I'm afraid I cannot say what happens to those people precisely, but, **as you said**, **balance is lost in the body**. For example, an experiment conducted by a research group in the U.S. found that....

So, it is important to follow your body clocks to maintain good health.

#### 2) The Redirecting Technique

- >Give a brief answer to the question.
- >Add some information that you want to impress on the whole audience, not only on the questioner.

This information does not have to be directly related to the question. You can focus on your "take-home messages" because they are the most important in your presentation.

Q: Does everyone have different settings of their body clocks?

- 2) The Redirecting Technique
- Q: Does everyone have different settings of their body clocks?
- A: Basically, yes; though I cannot exactly say who has what settings. But your question includes a very important point. Come to think of the settings of our body clocks, we must be aware of our natural rhythm of our bodies. If we feel we're working harder than our bodies can bear, we must not ignore the signal from our bodies.

#### **Practice**

#### Q & A in Scientific Presentation

Questioning: Cubing

Answering: Springboard

For mutual benefit!

#### Thank you!