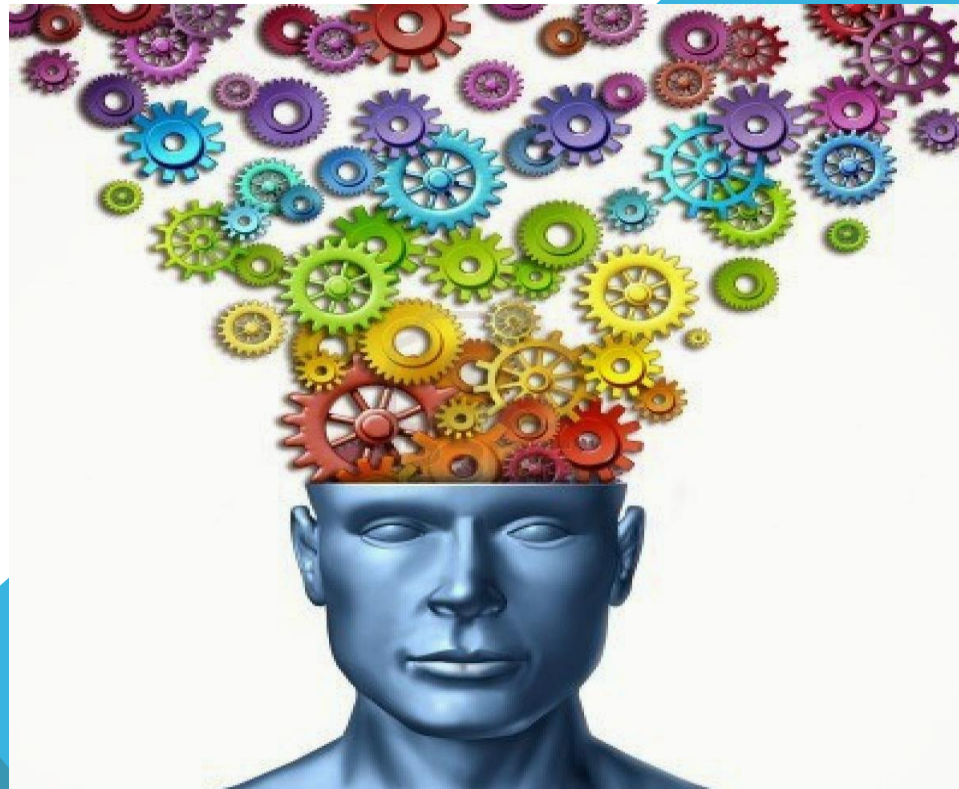


# QUESTIONING HOW WE QUESTION


## *RESEARCH AND STRATEGIES BEHIND KNOWLEDGE AND CURIOSITY*



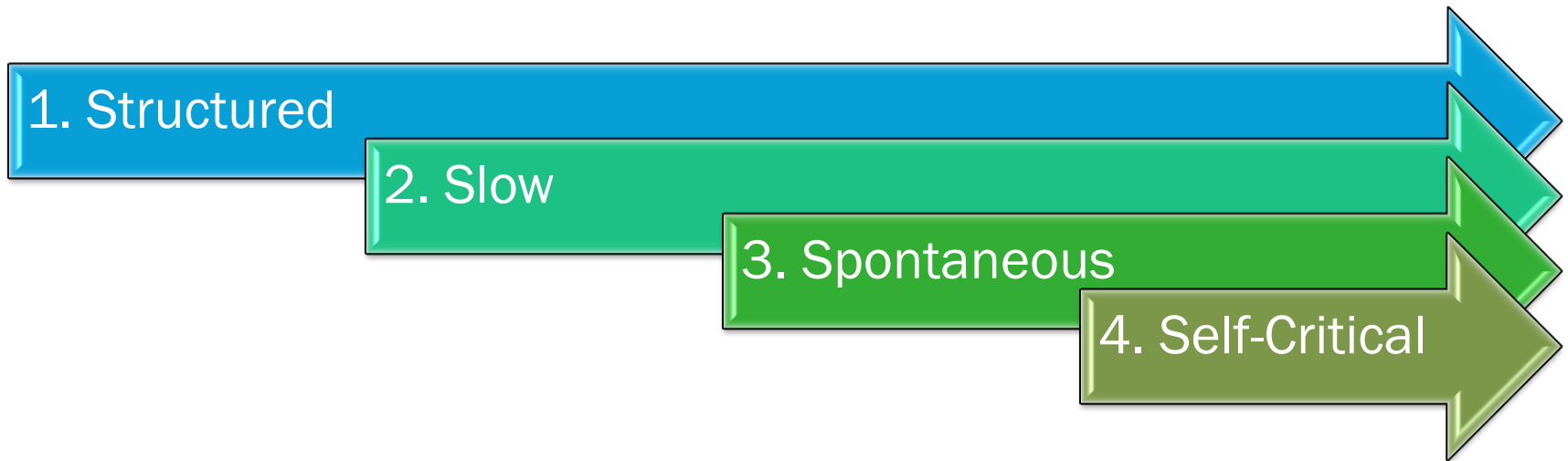
Sarah Donarski  
Teacher of English; Co-Director Festival of Education;  
MSc in Learning and Teaching (University of Oxford)

@s\_donarski

# PROBLEMS WITH QUESTIONING:

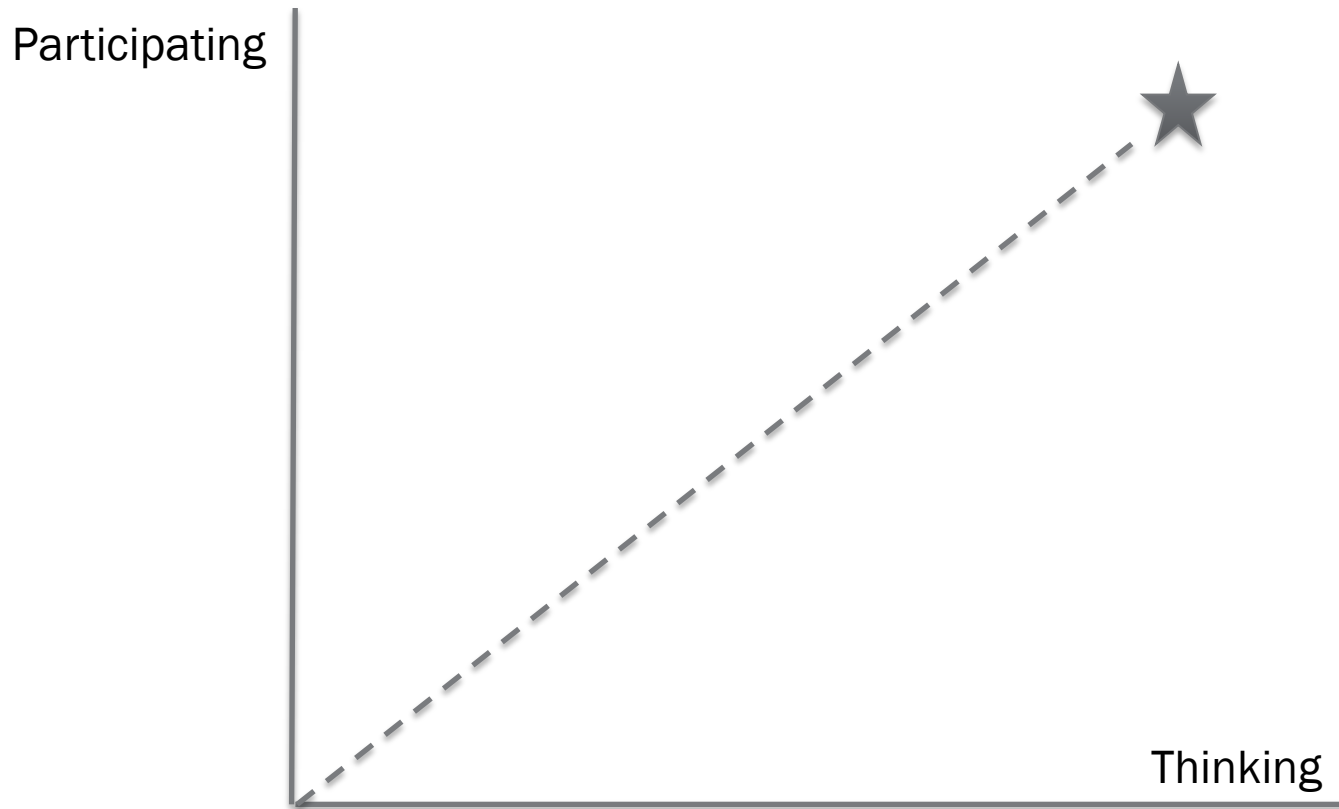
- It can give the illusion that it is effective.
  - It may not take into account knowledge learned previously.
  - It may not drive the creative thought process.
  - It may not challenge.
  - It has been differentiated.
  - The best student will provide the answers.
  - It can be too curriculum based.
- 

# EFFECTIVE QUESTIONING IN 4 STRANDS:



# QUESTIONING - STRUCTURED

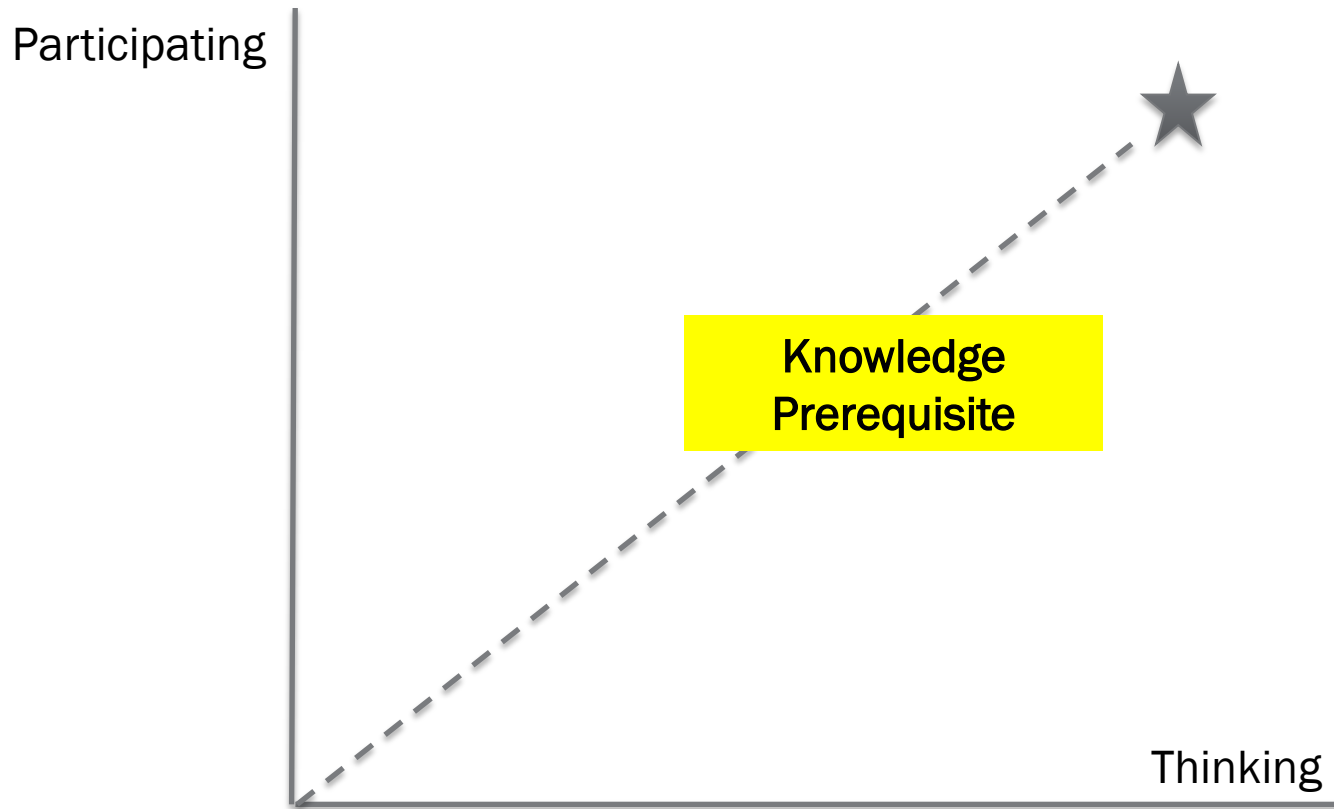
# DOUG LEMOV 'RATIO'



To stretch and challenge all does not mean working only participating.

It is about ensuring that both participating and thinking occur together.

# DOUG LEMOV 'RATIO'



Enabling all pupils to work does not mean working only participating.

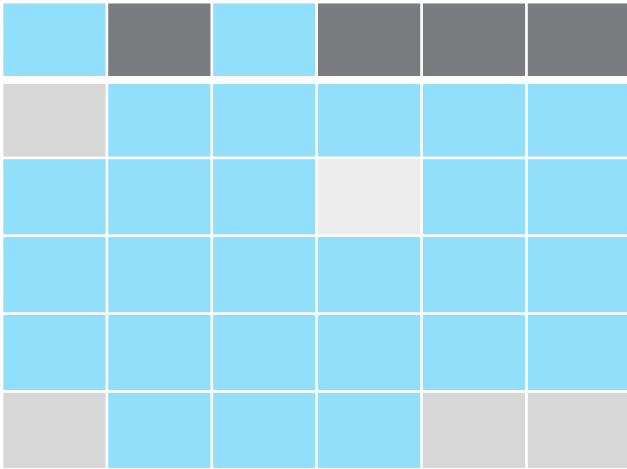
It is about ensuring that both participating and thinking occur together.



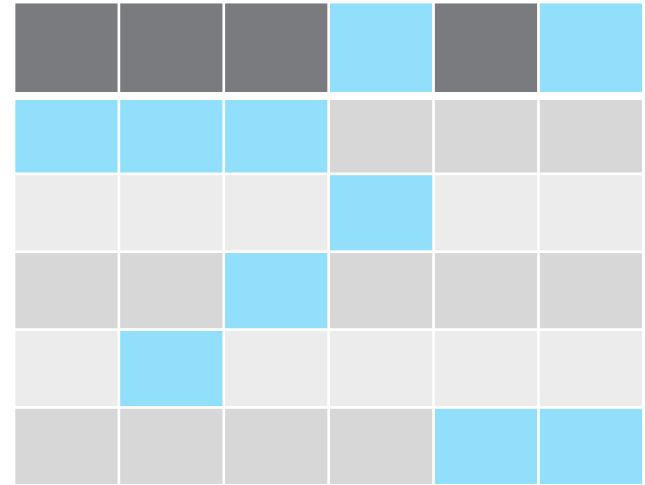
What would you ask your students about this painting?



# SCHEMAS OF KNOWLEDGE



**STUDENT A**



**STUDENT B**



# FOR GREATER PARTICIPATION RATIO

## 'Do you think' Questions

Questioning should be open to *subjective interpretation*.

- Why [do you think] the painter chose these colours?
- Who [do you think] is the most important person in the painting?
- What [do you think] is the most striking feature of this painting?



Or for even weaker students, give them a 50/50 option:

- Is the man in the water or the man killing the shark more important?
- Are your eyes drawn to the sky or the water?

Discuss: What could be wrong with these Starter Questions?

**What was the cause of the Iran/Iraq war in the 1980s?**

**What was Hamlet's main conflict?**

**In what ways did Donne comment on the scientific revolution?**



# **AVOID 'LOCKING' STUDENTS OUT OF LEARNING.**

Look back on your notes, come up with what you consider the main cause of the Iran/Iraq war in the 1980s?

Is Hamlet's inner conflict greater than his conflict with Claudius? Use your notes to help.

Recall the line 'freely men confess that this world's spent / when in the planets and the firmament / they seek so many new' – What is Donne saying about the Scientific Revolution? Note 'spent' (in this context) means 'wasted'



# TO ENSURE NO STUDENT IS LOCKED OUT...

Look back on your notes

Use your notes to help.

**Knowledge  
Prerequisite**

Note 'spent' (in this context) means 'wasted'

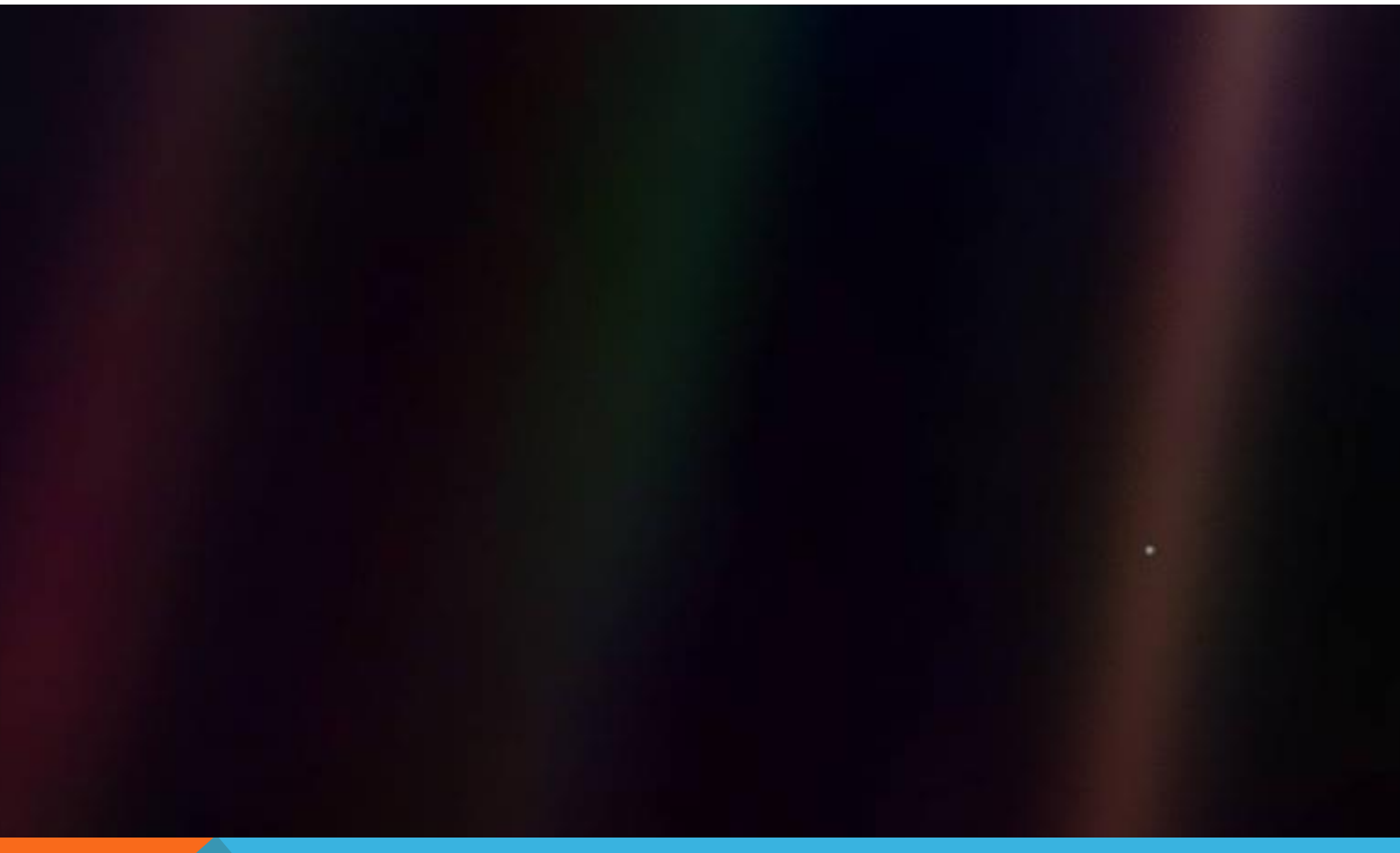


**QUESTIONING - SLOW**

# WHY IS THIS IMAGE VALUABLE?



# WHY IS THIS IMAGE VALUABLE?



First image of Earth taken by Voyager 1 from a distance of more than 4 billion miles. (1990)



# WHY IS THIS IMAGE VALUABLE?

“Look again at that dot. That's here. That's home. That's us. On it everyone you love, everyone you know, everyone you ever heard of, every human being who ever was, lived out their lives. The aggregate of our joy and suffering, thousands of confident religions, ideologies, and economic doctrines, every hunter and forager, every hero and coward, every creator and destroyer of civilization, every king and peasant, every young couple in love, every mother and father, hopeful child, inventor and explorer, every teacher of morals, every corrupt politician, every "superstar," every "supreme leader," every saint and sinner in the history of our species lived there-on a mote of dust suspended in a sunbeam.

The Earth is a very small stage in a vast cosmic arena. Think of the endless cruelties visited by the inhabitants of one corner of this pixel on the scarcely distinguishable inhabitants of some other corner, how frequent their misunderstandings, how eager they are to kill one another, how fervent their hatreds. Think of the rivers of blood spilled by all those generals and emperors so that, in glory and triumph, they could become the momentary masters of a fraction of a dot.

Our posturings, our imagined self-importance, the delusion that we have some privileged position in the Universe, are challenged by this point of pale light. Our planet is a lonely speck in the great enveloping cosmic dark. In our obscurity, in all this vastness, there is no hint that help will come from elsewhere to save us from ourselves.

The Earth is the only world known so far to harbor life. There is nowhere else, at least in the near future, to which our species could migrate. Visit, yes. Settle, not yet. Like it or not, for the moment the Earth is where we make our stand.

It has been said that astronomy is a humbling and character-building experience. There is perhaps no better demonstration of the folly of human conceits than this distant image of our tiny world. To me, it underscores our responsibility to deal more kindly with one another, and to preserve and cherish the pale blue dot, the only home we've ever known.”

— Carl Sagan, *Pale Blue Dot: A Vision of the Human Future in Space*

# 'SLOW' TO RECALL KNOWLEDGE

What 'knowledge' does a student have to have to answer the following?

How does Shakespeare reveal Lady Macbeth's character in the extract?

*Come, you spirits  
That tend on mortal thoughts, unsex me here,  
And fill me from the crown to the toe top-full  
Of direst cruelty. Make thick my blood.*

# SLOW STEPS BEFORE LARGER QUESTIONS

1. What is a metaphor?
2. What does 'unsex me here' metaphorically mean?
3. What is an imperative verb?
4. List the imperative verbs above.
5. In your opinion, do the imperative verbs and metaphor show Lady Macbeth to be a confident or controlling?
6. Does Shakespeare present Lady Macbeth confident or controlling here? Give evidence.
7. Explore the significance of Lady Macbeth in the following extract.



*“Students are more likely motivated to respond to feedback when they know they can get better”*

# EXPLORE HOW SHAKESPEARE PRESENTS CONFLICT

What is the greatest conflict in Hamlet?

What line sums up Hamlet's conflict and why?

Is inner conflict or outer conflict most influential in driving the tragedy?

**QUESTIONING - SPONTANEOUS**

# KNOWLEDGE VS UNDERSTANDING QUESTIONS

Knowledge is when we explain the 'unknown' in terms of the known. When we succeed in fitting a new experience into our system of concepts and ideas

'Understanding is the direct and unmediated contact with reality as it experienced moment by moment.'

Knowledge

Understanding



Confidence in  
*recall and  
knowledge  
manipulation*

# THE 'THANK YOU' EXAMPLE...





# TABER, 2011: CONSTRUCTIVISM AS EDUCATIONAL THEORY

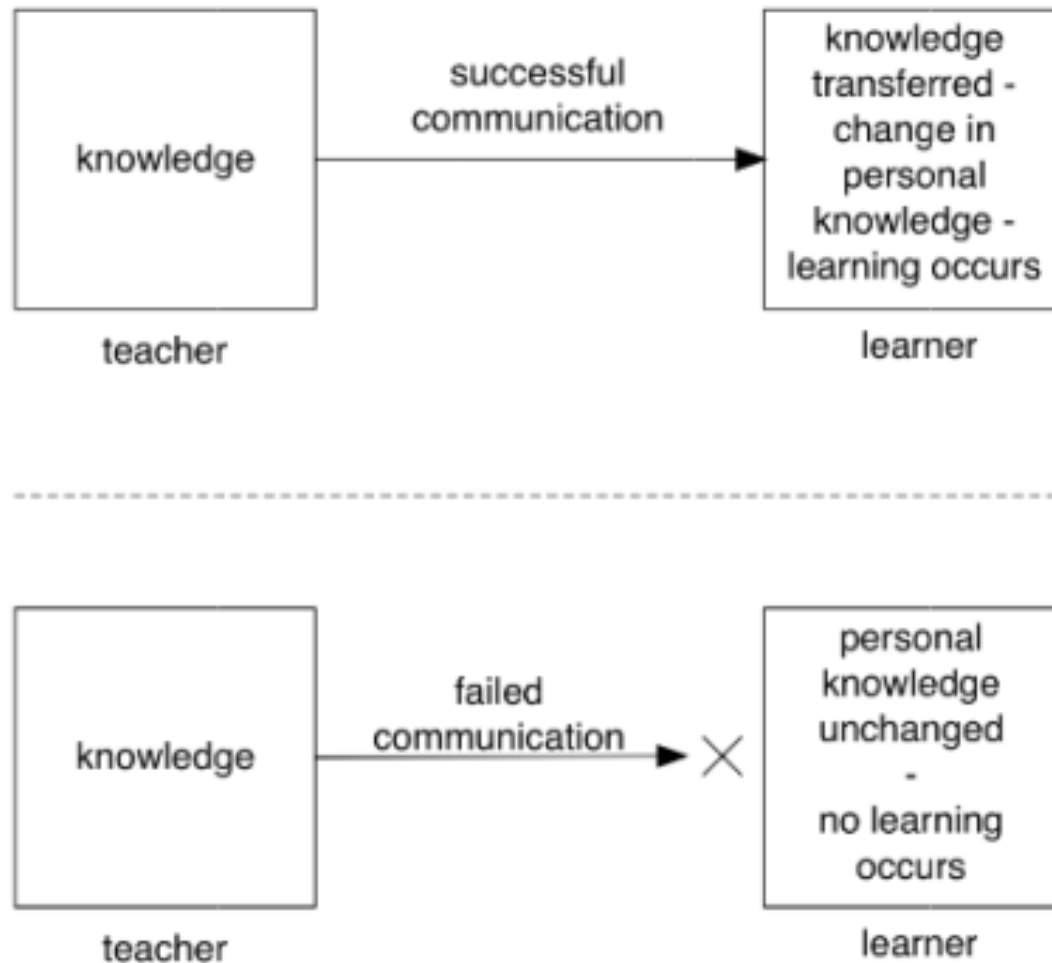


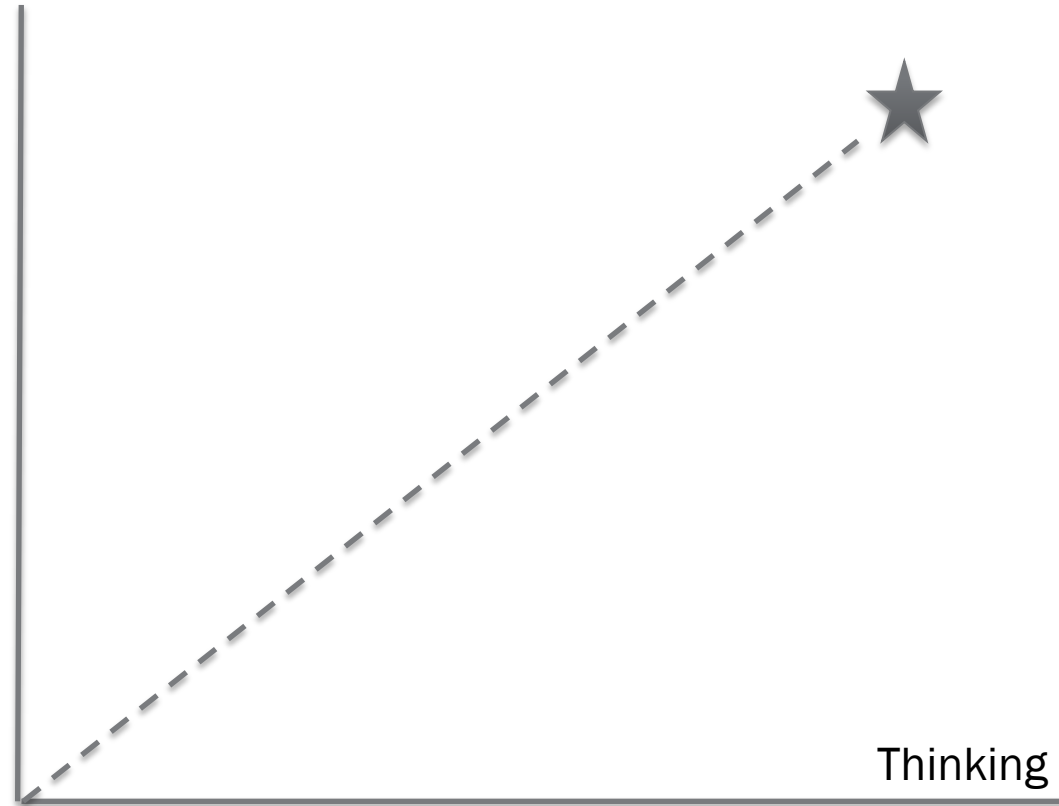
Figure 3. A binary view of teaching – either the teacher’s knowledge is copied to the learner’s mind, or there is no learning.

# 3 STRATEGIES FOR MAXIMISING CONFIDENCE IN UNDERSTANDING

Participating

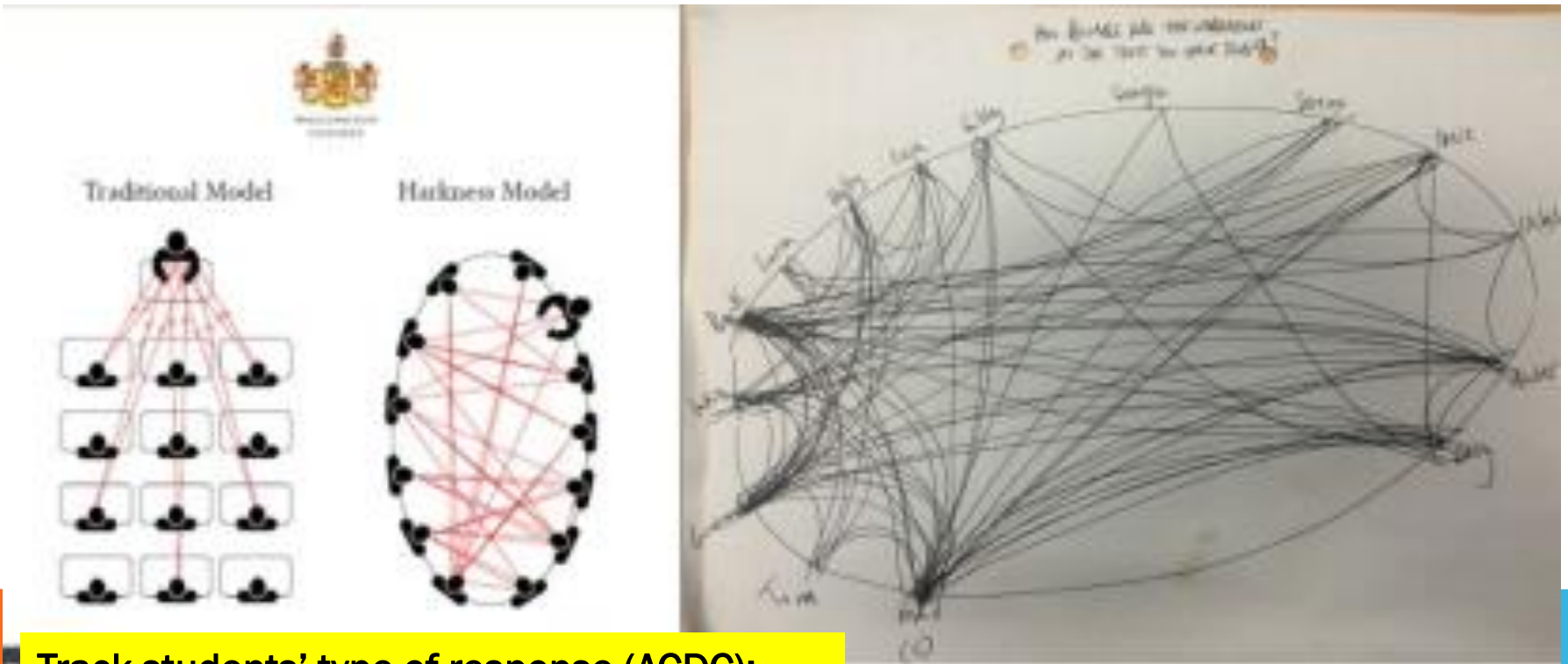
## 1. DISCUSSION

“There is no doubt that talk, albeit by the teacher or peers, has the capacity to stimulate and extend students’ thinking and advance their learning. Teachers do this when they encourage students to engage in reciprocal dialogues where they exchange information, explore issues, interrogate ideas, and tackle problems in a cooperative environment that is supportive of these discussions. In turn, students learn to listen to what others have to say, consider alternative perspectives, and engage critically and constructively with each other’s ideas by learning how to reason and justify their assertions as they cooperate together. (Gillies, 2015)”



# DISCUSSION/HARKNESS METHOD

<https://perspected.wordpress.com/2016/12/10/how-to-harkness-strategies-and-advice/>



Track students' type of response (ACDC):

Agreed	Changed	Developed	Challenged

## 2. ENCOURAGE KNOWLEDGE TRANSFERENCE



### **3. LET THEM PLAY WITH KNOWLEDGE!**

- Ask more abstract, contemporary, and provocative questions that propel the student entirely out of the classroom context – yet require knowledge from the classroom to achieve.
- ‘goal setting’ develops intrinsic motivation so perhaps it is important that we move our students’ goal posts slightly away from the curriculum every now and then.



# QUESTIONS TO PLAY:

1. Using your understanding of astrophysics, what are the inaccuracies of this Star Trek scene?
2. In what ways could one argue that Wham's Last Christmas is written about Hamlet?
3. Was Huxley weird? (Use your understanding of Brave New World, and Huxley's essays).
4. Do Eddie Vedder's lyrics on his soundtrack to Into the Wild effectively highlight passages of Krakauer's text?
5. Which Shakespearean character is closest to Donald Trump? (An ice-breaker used for Oxbridge interviews)
6. Of all the texts we have studied, what is the most overrated and why?
7. What is the most underrated myth?
8. Does power corrupt?
9. What role did chemists play in the war? Are they heroes or villains?
10. Where is the line between illegal and legal drugs?

**QUESTIONING – SELF-CRITICAL**



# WASON'S SELECTION TASK:



psychologyinaction.org

PREPOSITION: If there is an A on one side of a card, there is a 4 on the other.

What cards must be turned to prove the preposition?

**SELF-CRITICAL:**

**Argue against yourself.**



# SUMMARY

- Challenging is about ensuring that you do not lock students out – but still stretch the top.
- Questioning is an effective tool for this, but not the way we would expect.
  - Slow (where required – let them think!)
  - Structured (for knowledge recollection and gaps in schemas)
  - Spontaneous (to show understanding)
  - Self-Critical (to encourage evaluation and self-reflection)

1. Structured

2. Slow

3. Spontaneous

4. Self-Critical