

Better Curriculum Design *via neuroscience*

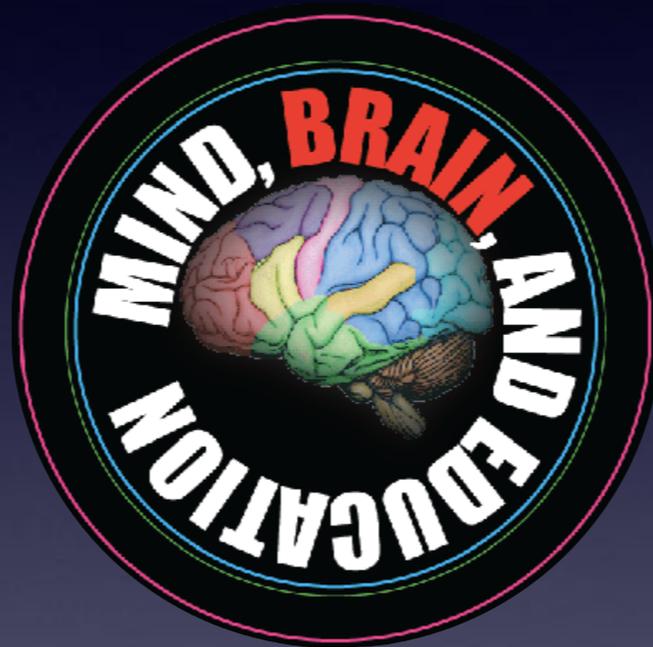


Robert S. Murphy
University of Kitakyushu



JALT 2016
Sunday 1:05-2:05

What is neuroELT?



Strongly influenced by

Harvard Graduate School of Education

Mind, Brain, and Education program

- What is “brain-friendly”? -what is not??



- Do you know any neuro-myths?
- What are some brain-unfriendly activities?

Better Curriculum Design via Neuroscience

Today's Content



- *Theory (better design, better assessment)*
- *In Practice, with real student example*
- *Your turn!*

*Who?
When?
Where?
Why?
What?
How?*

Similar to yesterday's presentation (for young learners), but more science, more jargon, more thinking

Who?



active

brain work
"flow"



Who should be doing the bulk of the work?
(teacher or the student)

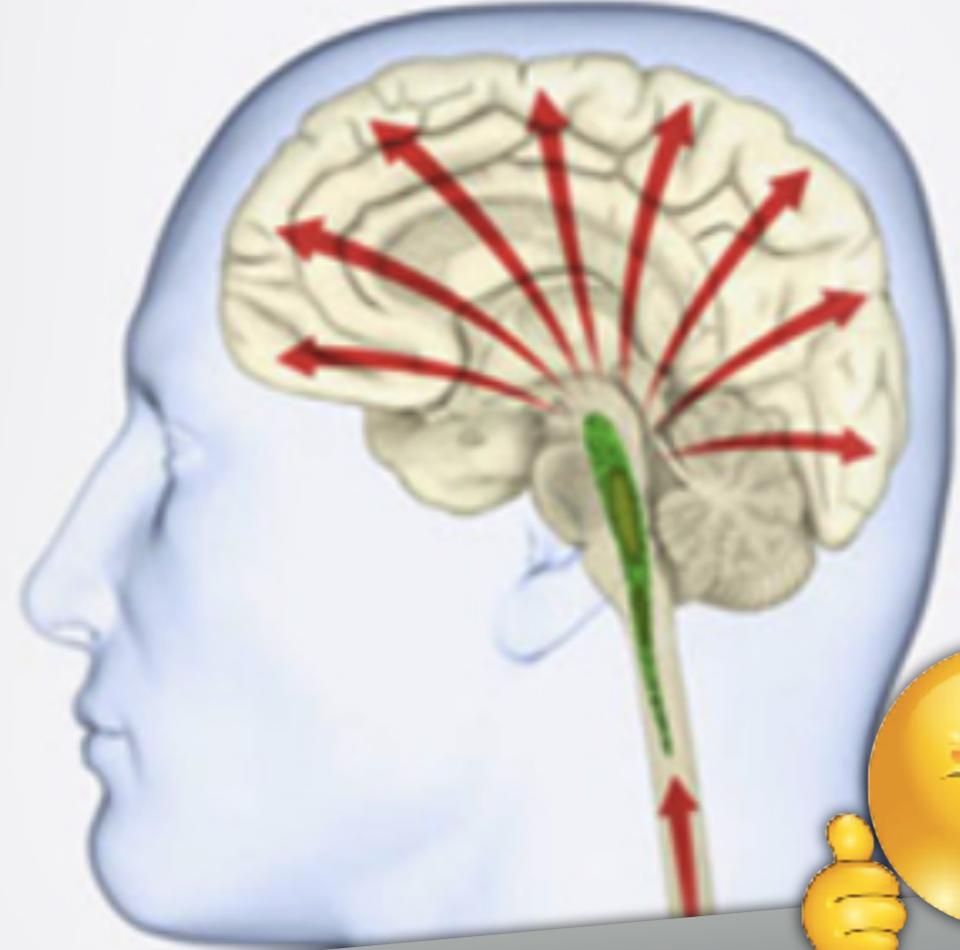


passive

"default mode"
"superficial learning"



When?



RAS

- novelty
- physical needs
- exec. decisions

When does information get through?
 When does learning occur?

RAS

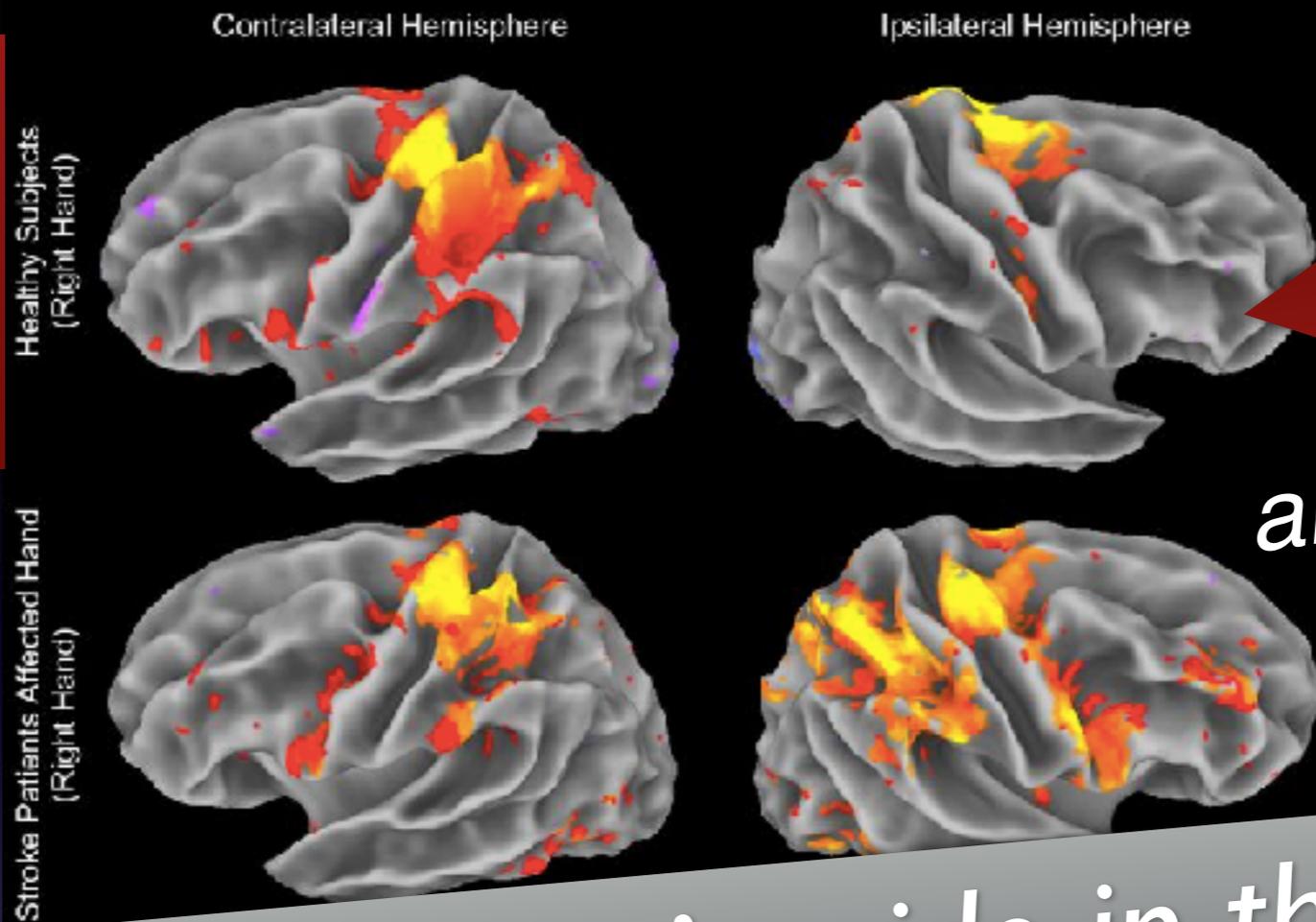


passive

“default mode”



Where?



everywhere!
and nowhere!

Where does 'memory' reside in the brain?
Where does memory disappear to?

memory is 'real time' analysis
memory is not concrete

perpetual

nothing "hard wired"



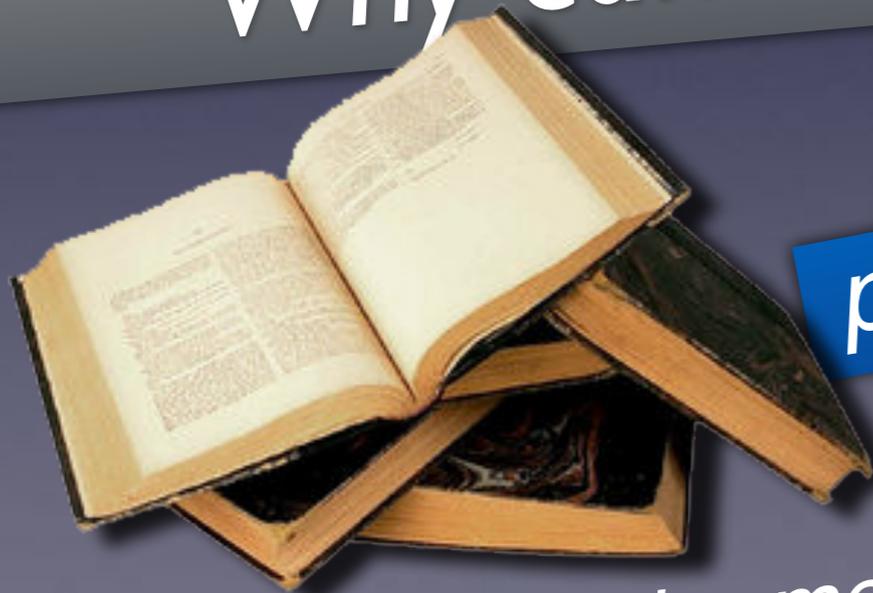
Why?



RAS

- novelty
- physical needs
- exec. decisions

Why should teachers care?
Why can't we just "teach the book"?



passive

"need aha moments"
"flow"



dopamine rush

What?

Solvable mysteries

Aha moments

Emotions

Ownership!

Providing choices

Empowerment

not linear

cyclical

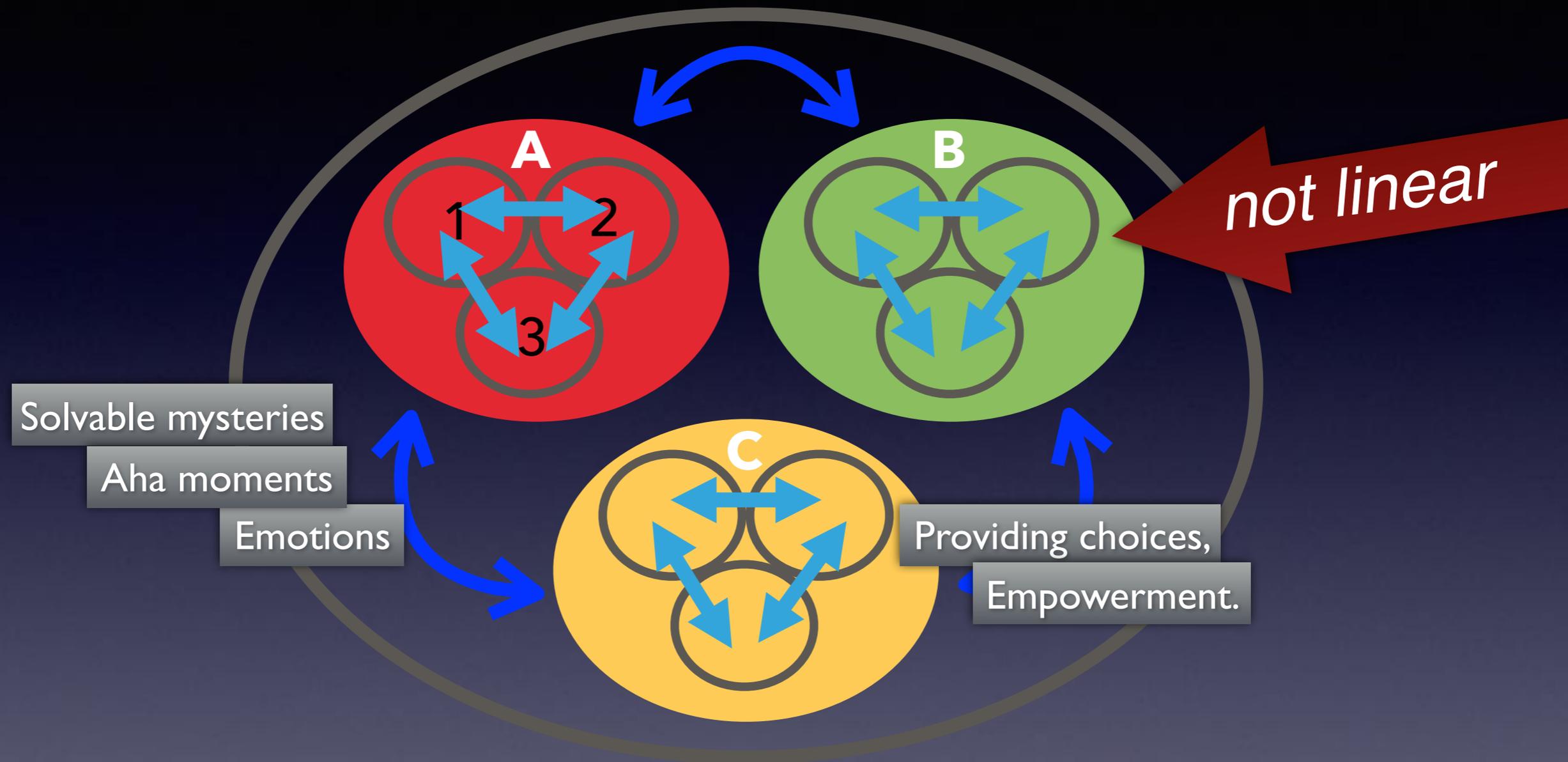
Your students need to do the heavy work!

students make the connections

What can you do?
What is a neuroELT curriculum?

1. While lesson planning, identify the learning goal.
2. Identify at least three core elements of that goal.
3. Identify at least three sub-elements of each core.

Pair discussion time:



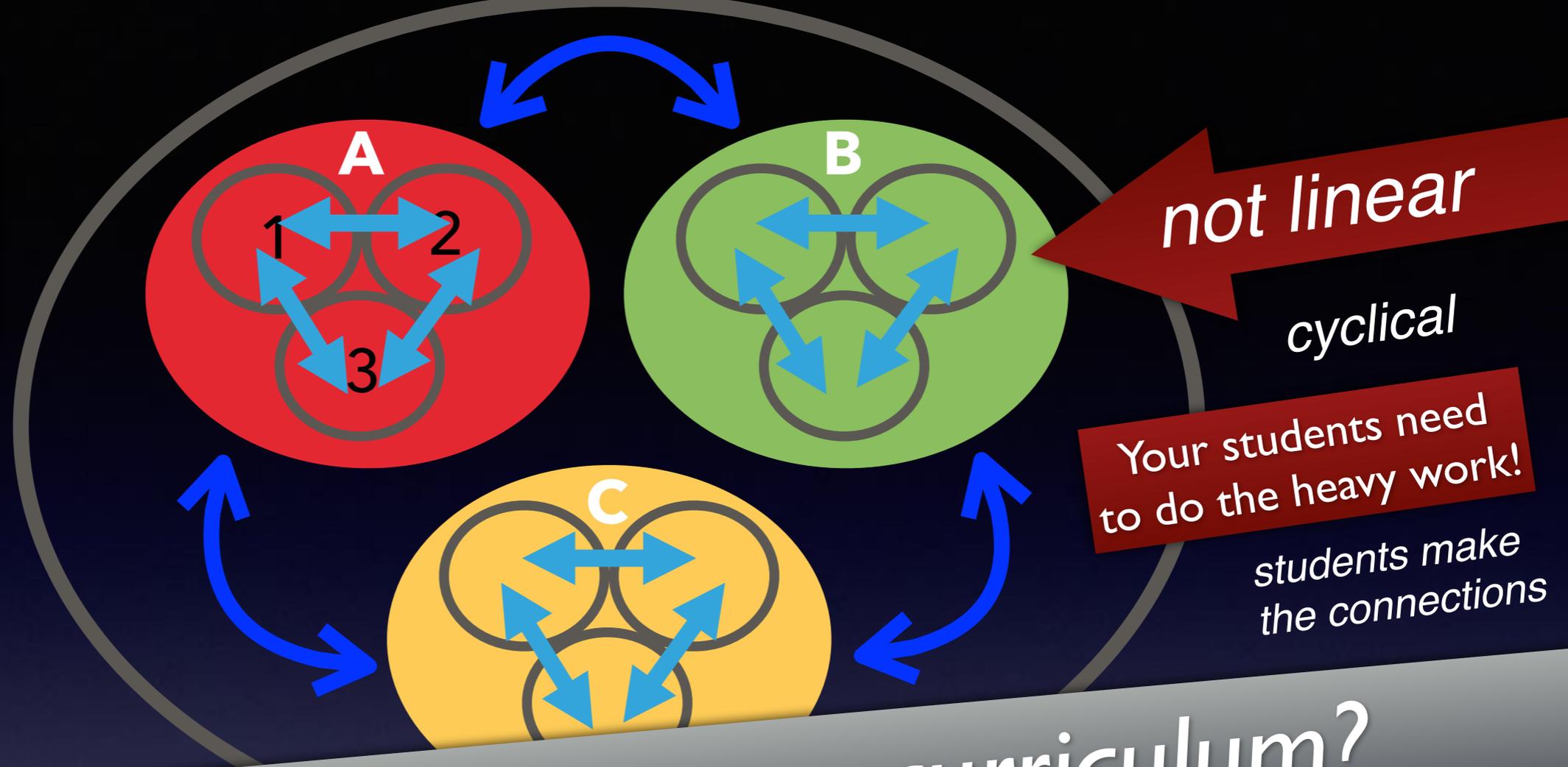
(a) studying from a book that discusses these connections

VS

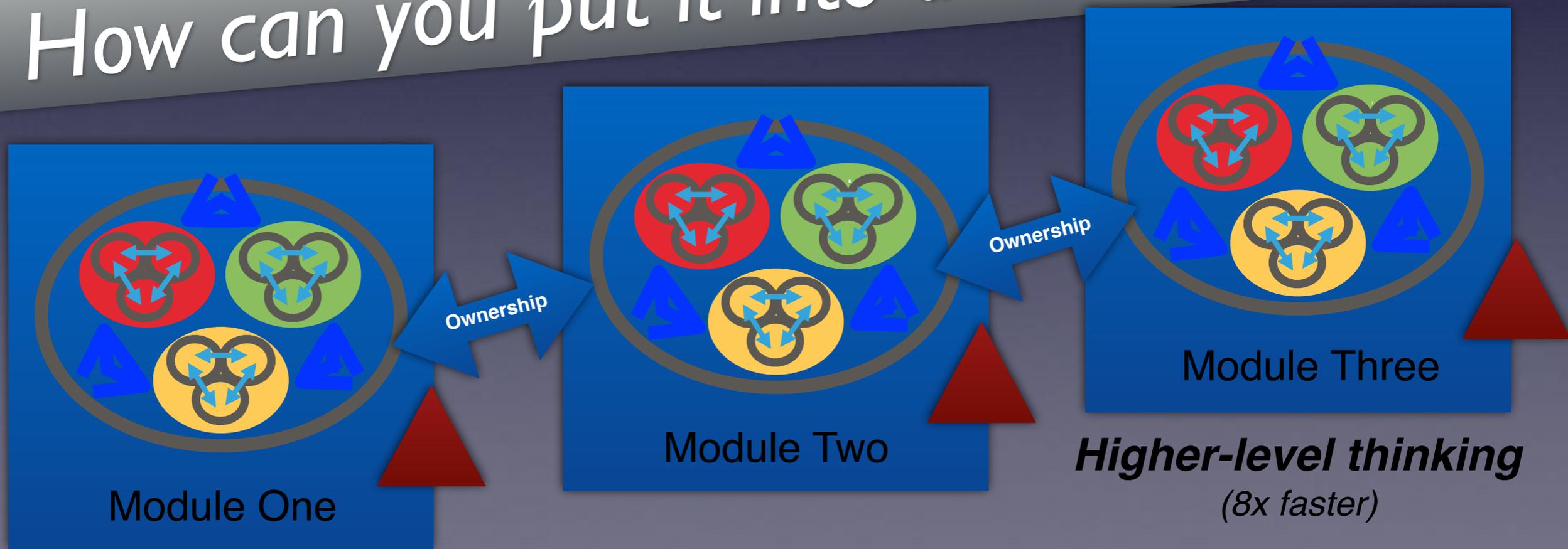
(b) the student working out their own connections above

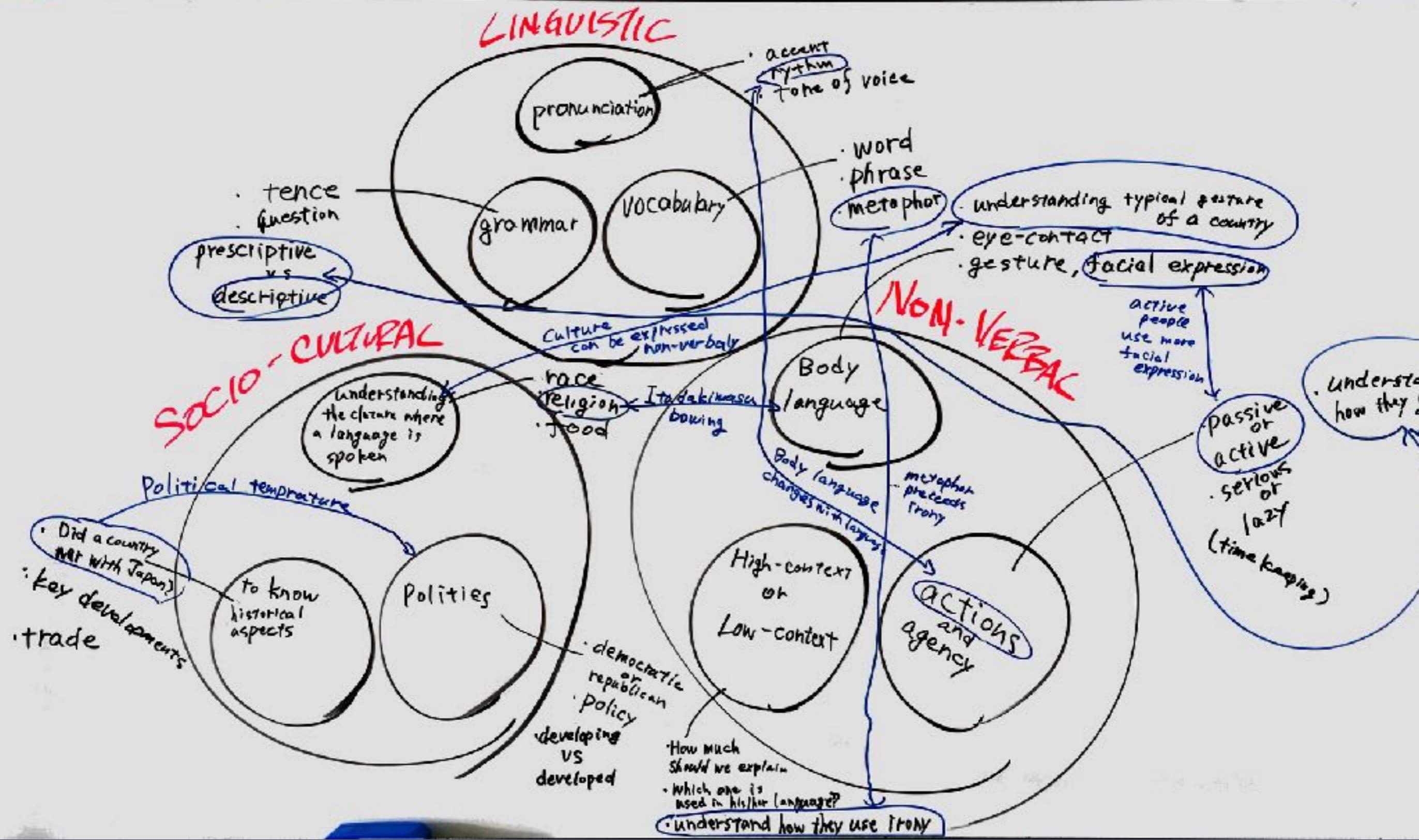
How?

Pt. I



How can you put it into a curriculum?





Real student's work from this week

LINGUISTIC



Socio-Cultural

NON-VERBAL

· tence
· question
· prescriptive vs descriptive

grammar
vocabulary

· phrase
· metaphor
· understand
· eye-con
· gesture

Culture can be expressed non-verbally

Understanding the culture where a language is spoken

race
religion
food

Itadakimasu
bowing

Body language

Body language changes with language
metaphor precedes irony

Political temperature

to know historical aspects

Polities

High-context or Low-context

actions and agency

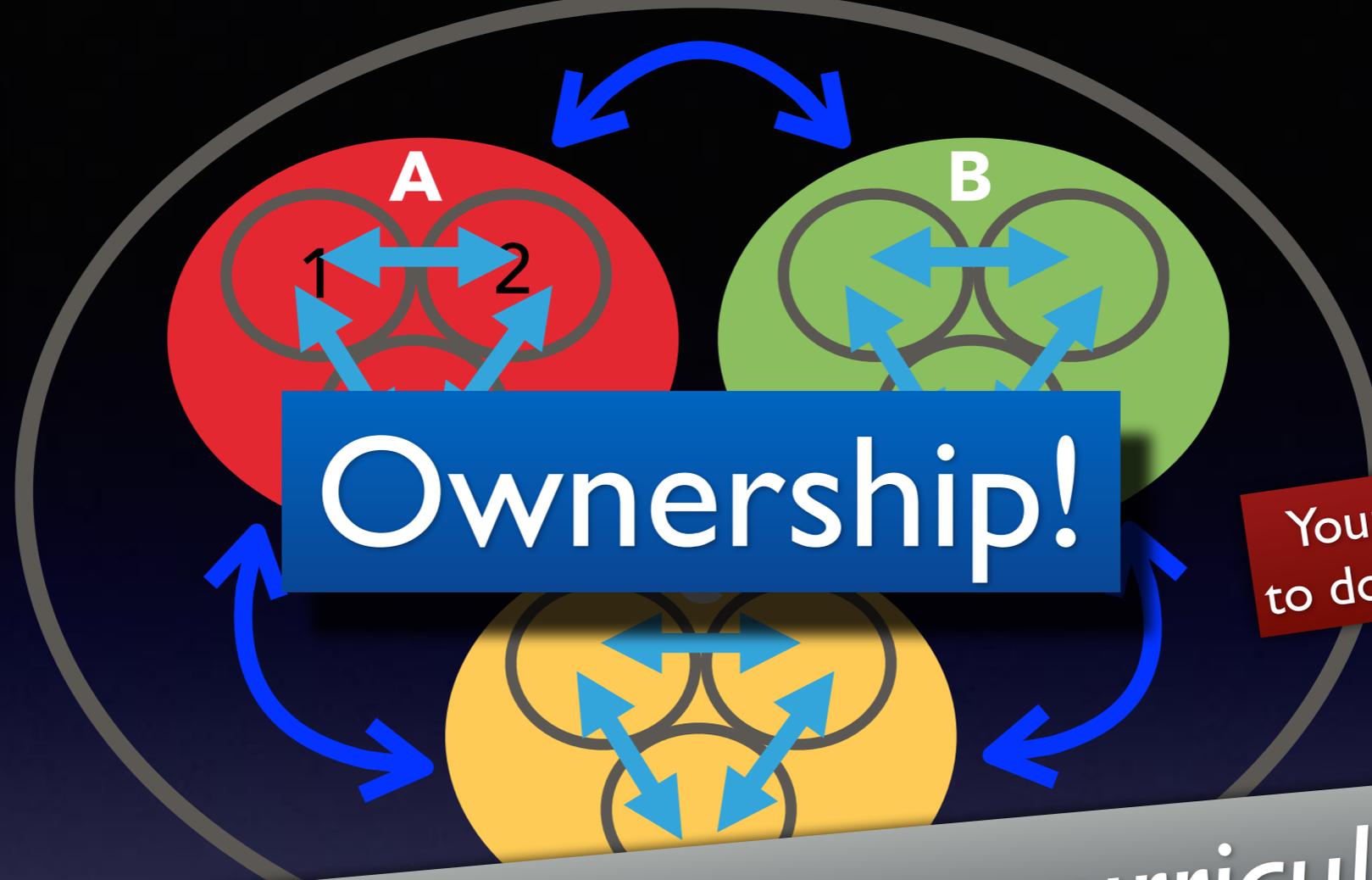
· democratic or republican
· policy
· developing vs developed

· How much should we explain
· Which one is used in his/her language?
· understand how they use irony

How?

Pt.2

Presentation Class



Your students need to do the heavy work!
students make the connections

How can you put it into a curriculum?

[Master List]

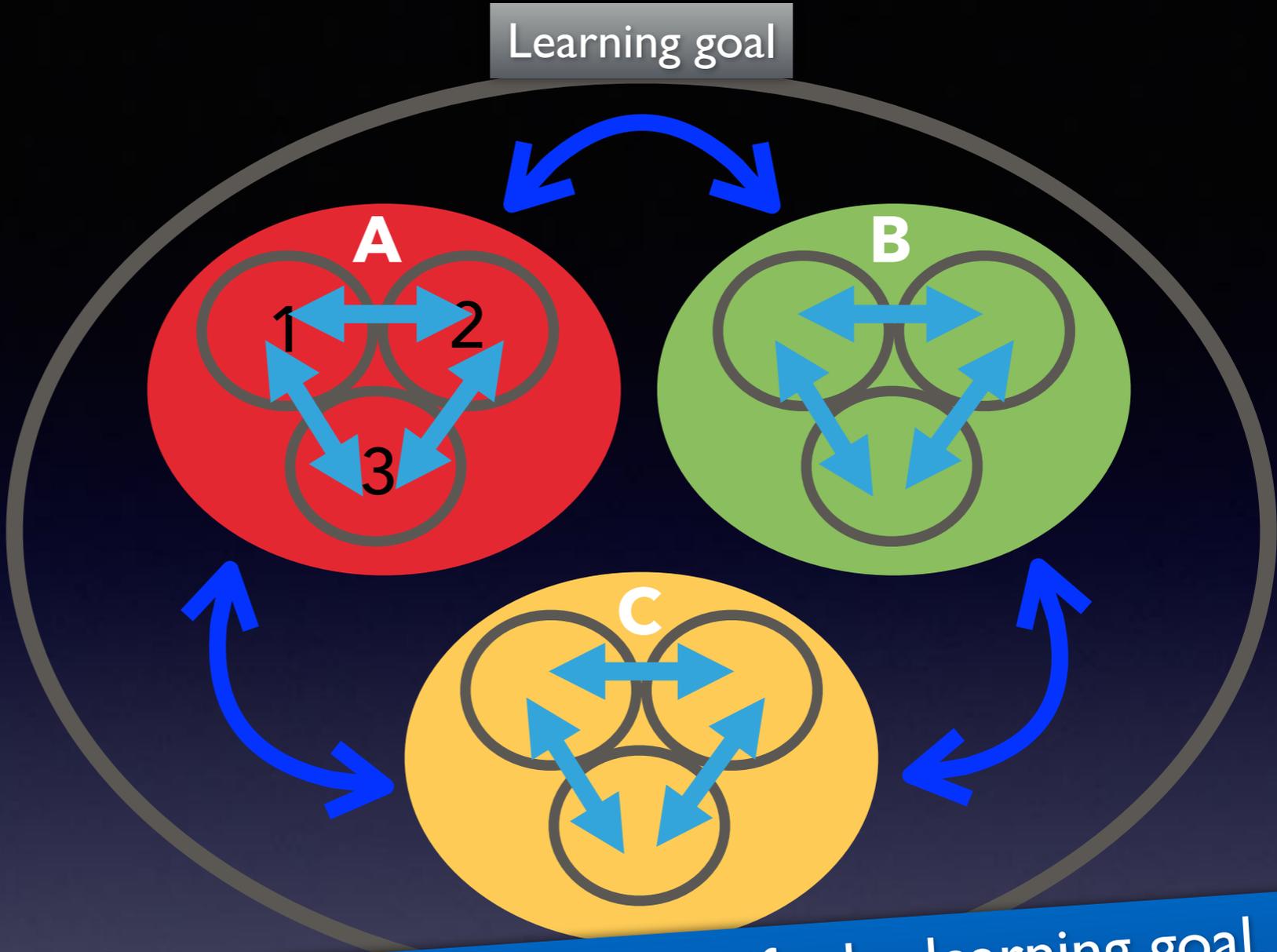


1. Students create a list of ideas, lexical items, grammatical structures..
2. They come to me (teacher) for advice.
3. "IF I were doing a presentation on this topic, I'd say xxx, yyy, zzz"
4. Students listen, choose, combine into their own MASTER LIST

Higher-level thinking
(8x faster)



How?
Your turn!



[Master List]



1. While lesson planning, identify the learning goal.
2. Identify at least three core elements of that goal.
3. Identify at least three sub-elements of each core.

4. Incorporate the master list into your plans!

LET'S KEEP IN TOUCH!



FAB-EFL.com

Downloads

FAB Conferences

neuroELT Maxims

Dynamic Skill Theory (Fischer)

YouTube "neuroELT maxims"



Robert S. Murphy (Facebook) m@murphyschool.com