



Playing beyond CLIL



Finding pieces of the Jig Saw



THE UNIVERSITY
of EDINBURGH

Do Coyle

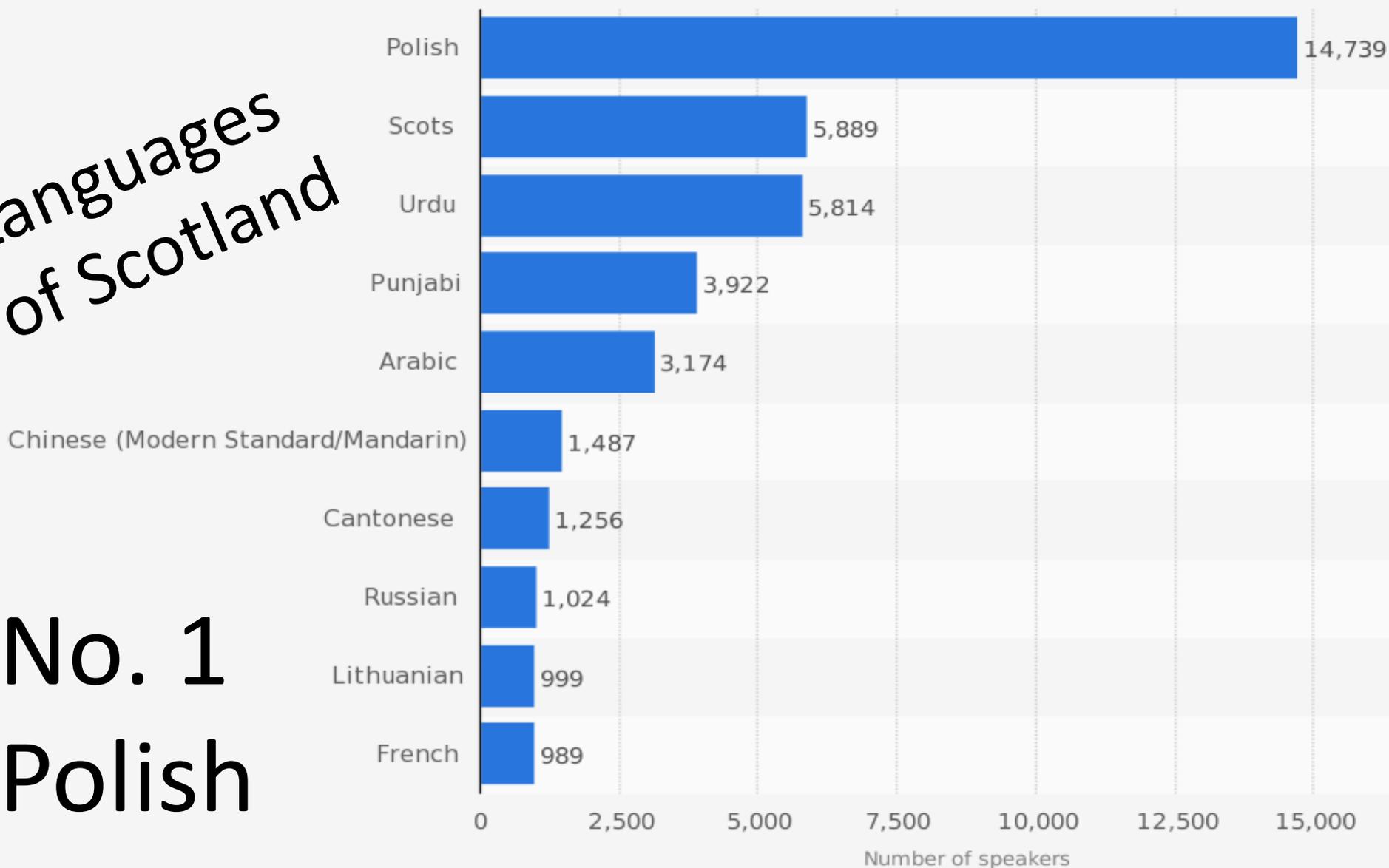


Our
linguistic
DNA

Non-English main home languages ranked by number of speakers in Scottish schools in 2016

Languages of Scotland

No. 1
Polish

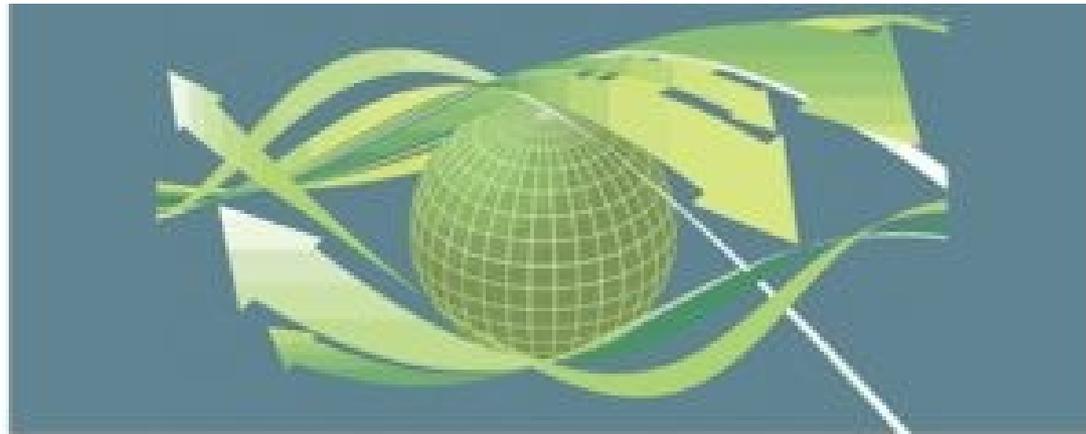


SEALL SEO, HERMIONE



SGEULACHD EILE AIG AN DAILY GAEL

**258 million people
are living outside
their birth country**



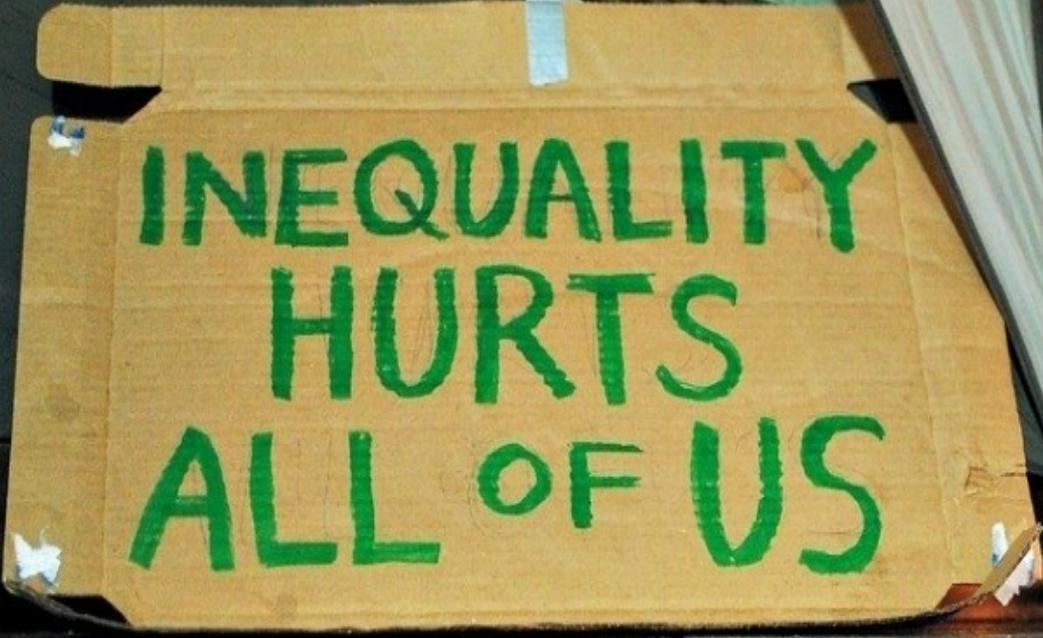
Grammar
Teaching
Structure
Clauses
Sentences
Tense
Verbs
Adverbs
Speech
Present
Past
Forms
Simple
Break

grammar
verbs
prepositions
questions
english
nouns
articles
present
past
negative
interrogatives
adverbs
infinitives
tenses
relatives
future
affirmative
genitive
exercises
speech
adjectives
workshops
conditionals
gerunds
reported
passives

“Weel, Gruffalo,” said Moosie. “Eh hope yi’ll agree
Aabody iz feart o me!

But noo meh belly’s rummlin inside me,
An meh favrit food iz gruffalo bridie.”



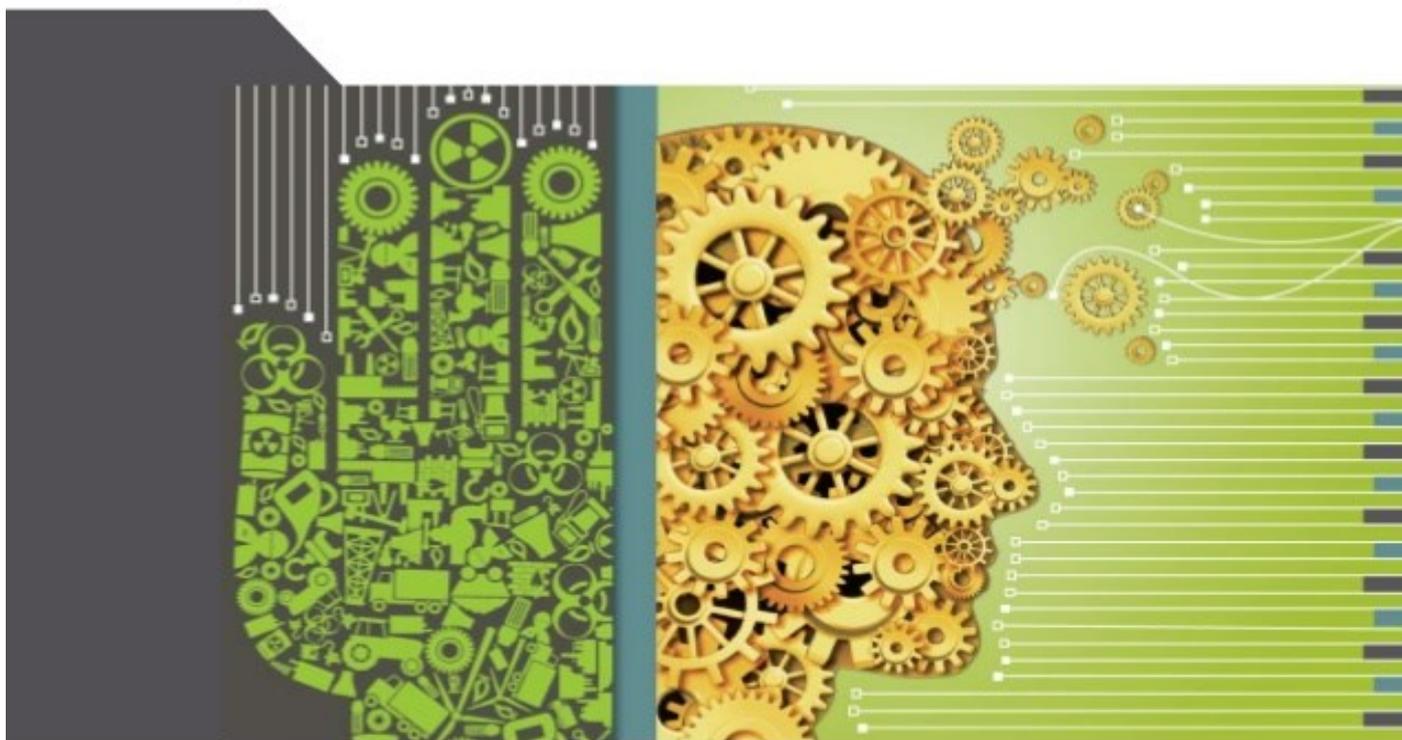


INEQUALITY
HURTS
ALL OF US

A photograph of a protest sign made from a flattened cardboard box. The sign is propped up against a white tent structure. The text is written in green, blocky, hand-painted letters. The background is a blurred night scene with warm lights and people.

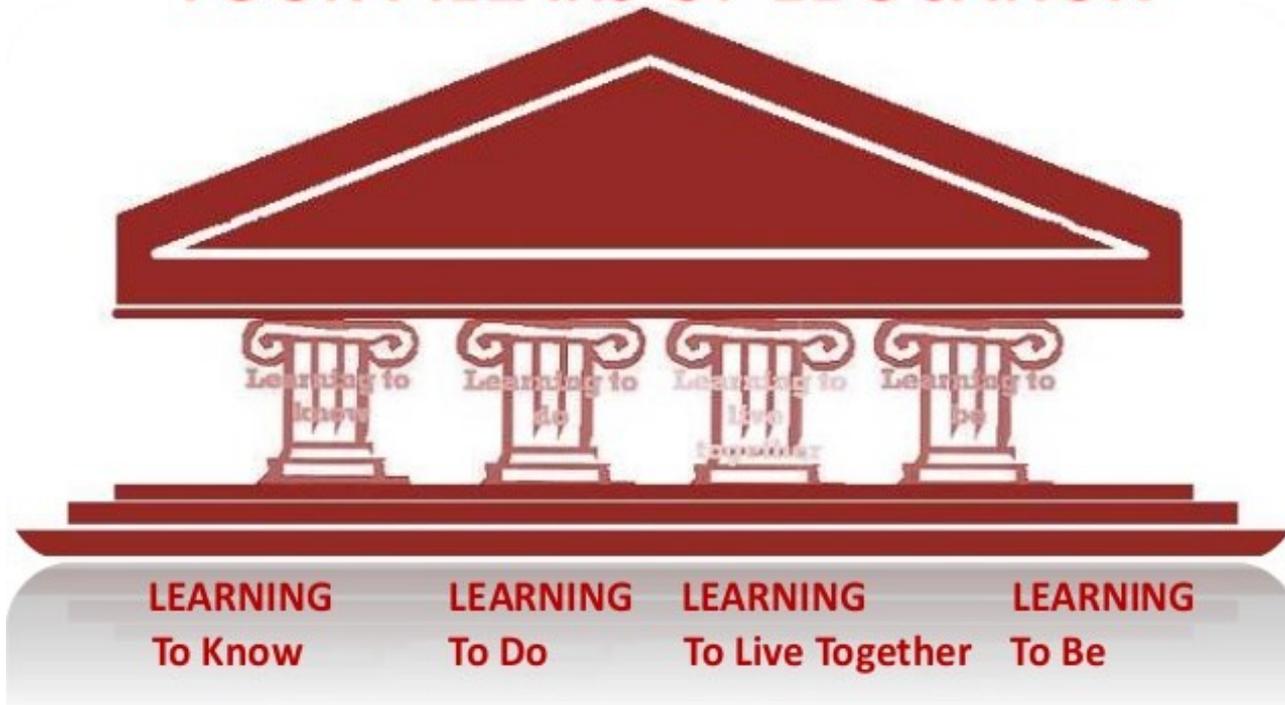
OECD 2016 proficiency in several information-processing skills – literacy, numeracy and problem-solving in technology-rich environments

 **Why skills matter**
FURTHER RESULTS FROM THE SURVEY OF ADULT SKILLS



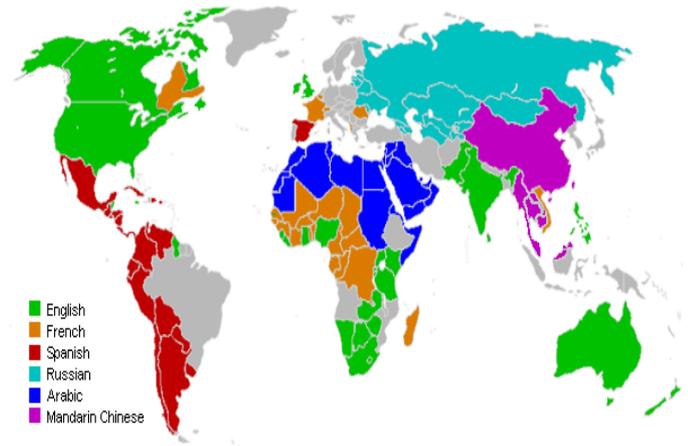
The International Commission on Education for the 21st
Century advocates

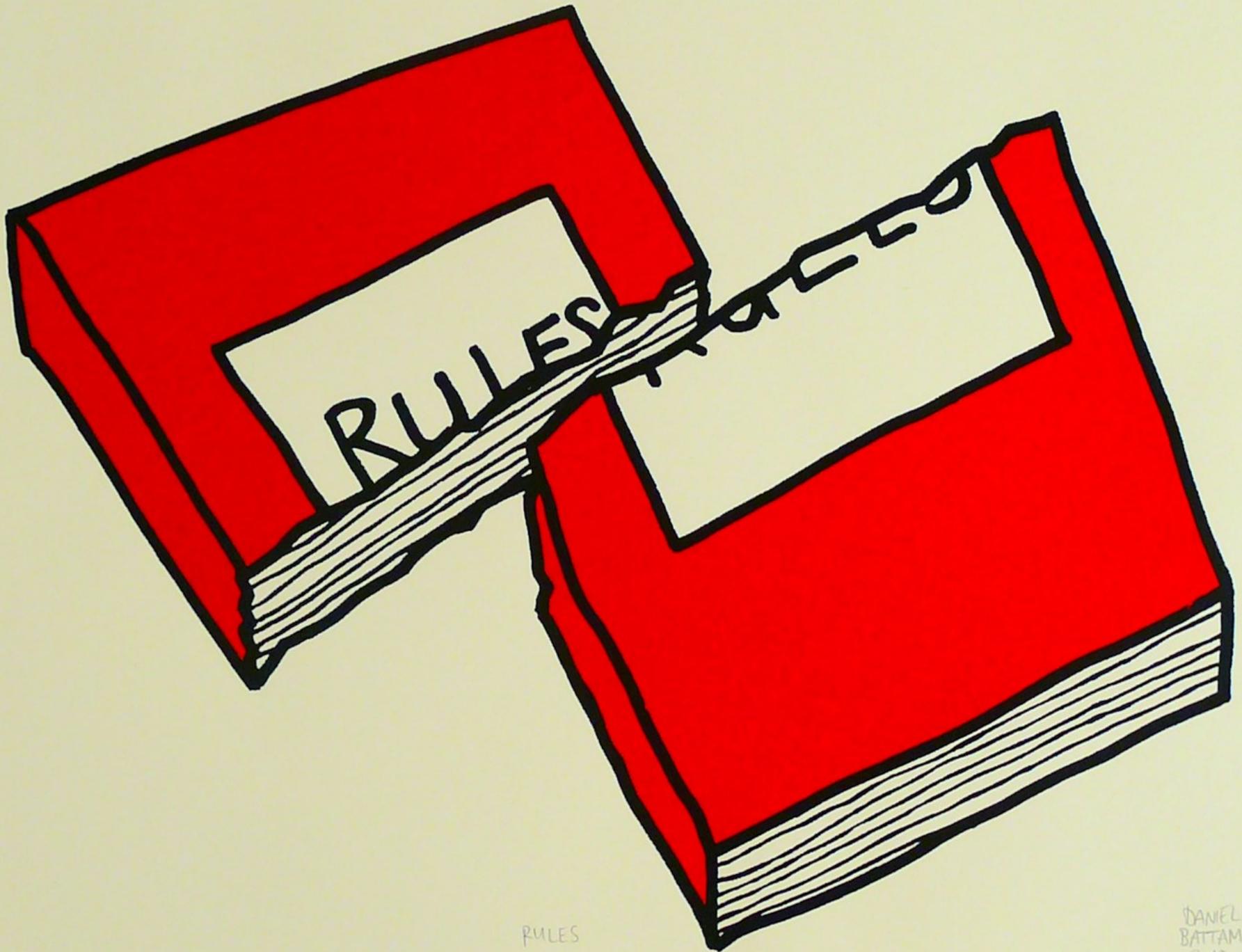
FOUR PILLARS OF EDUCATION



Shifts in Landscapes

- Societal changes
- Global concerns
- Policy and political imperatives
- Unprecedented digital advancement
- Fit-for-purpose education





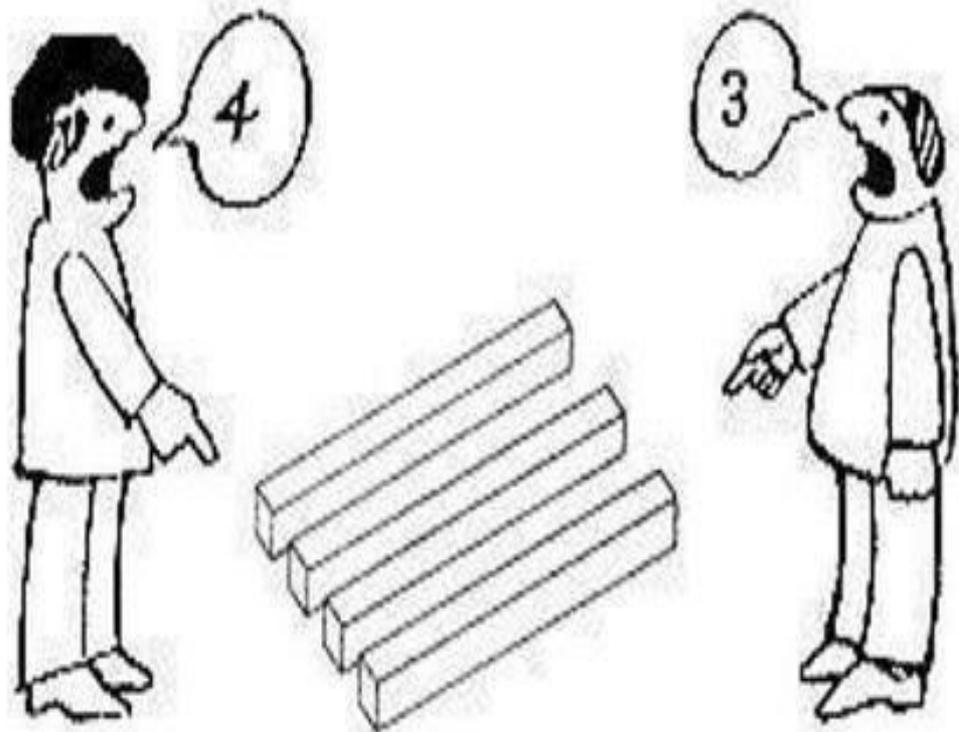
2/10

RULES

DANIEL
BATTAMS
2010

The world we live in
and the classrooms we
learn in and the learners
and teachers who work
together are changing. A
good news story...





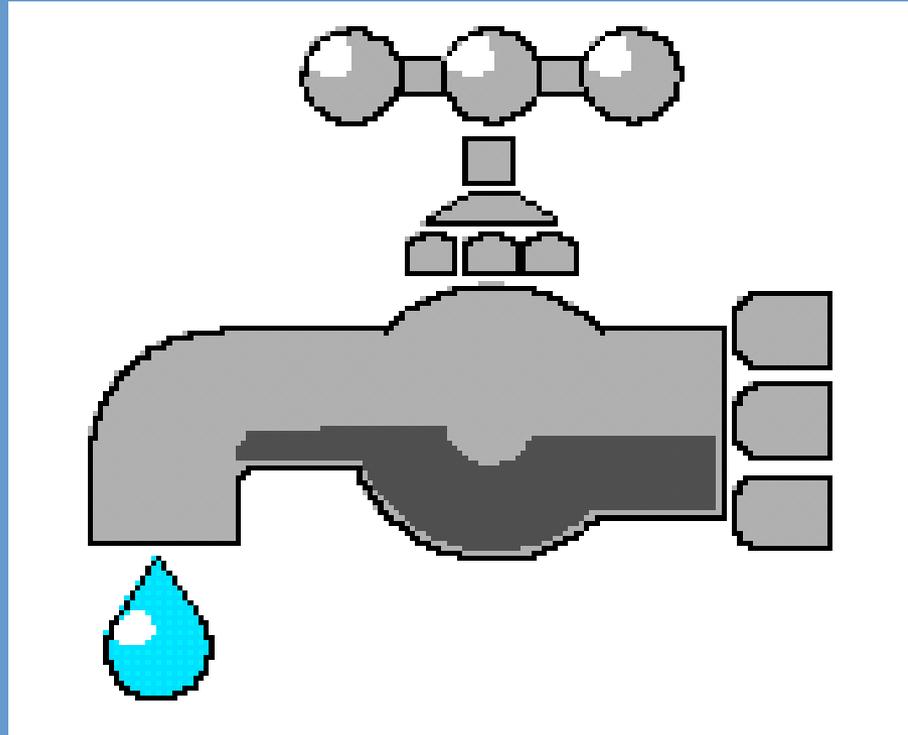
**Language
is never
neutral**





Ceci n'est pas une pipe.

Visual



Representation

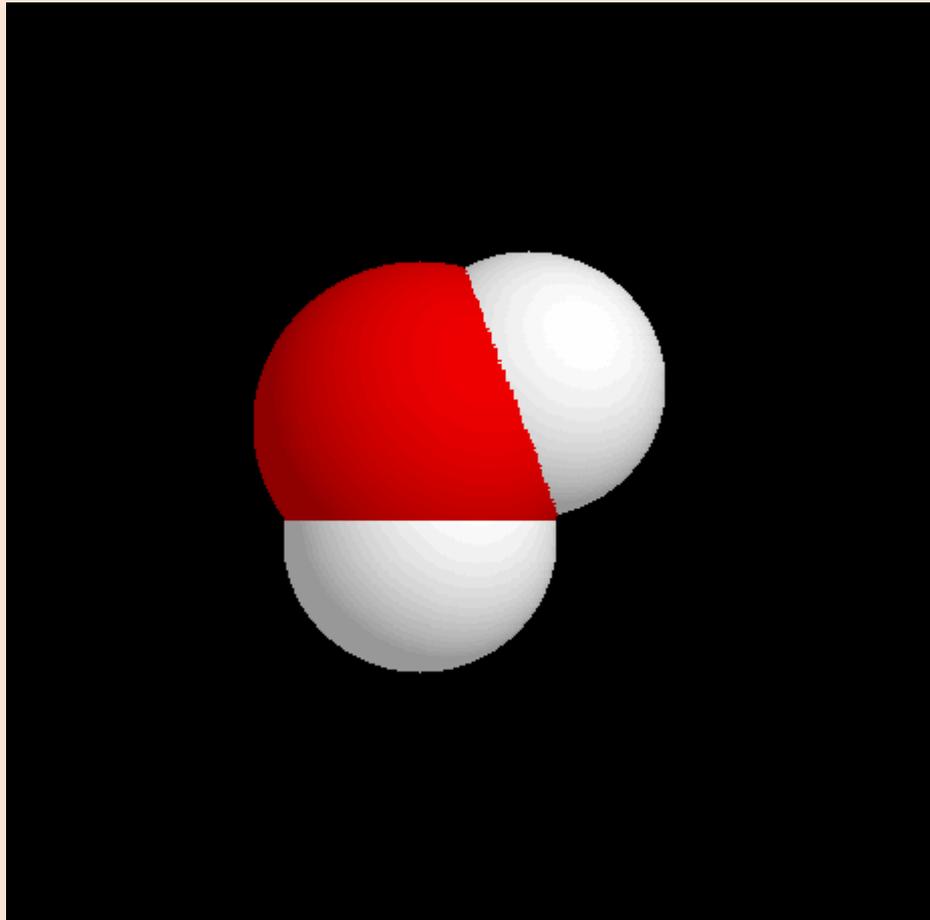
What kind of language is happening here?

What does it mean? Who can access it?



What does this represent?

What is the role of image in concept building?



The lartey frimps krolacked blinfly in the detchy shilbor

Read the sentence above and answer the following:

- 1. What kind of frimps were they?*
- 2. What did the frimps do?*
- 3. How?*
- 4. In what kind of shilbor did they krolack?*
- 5. Which word is the subject in this sentence?*
- 6. Which is the verb?*

The lartey frimps krolacked blinfly in the detchy shilbor

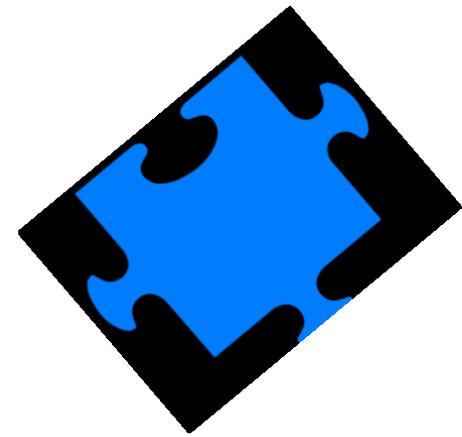
7. **Explain** why the frimps were krolacking the detchy shilbor. Be prepared to justify your claims with facts.
8. If you had to krolack in the shilbor, which one item would you **choose** to have with you and **why**?



10 DEFINITIONS OF LEARNING

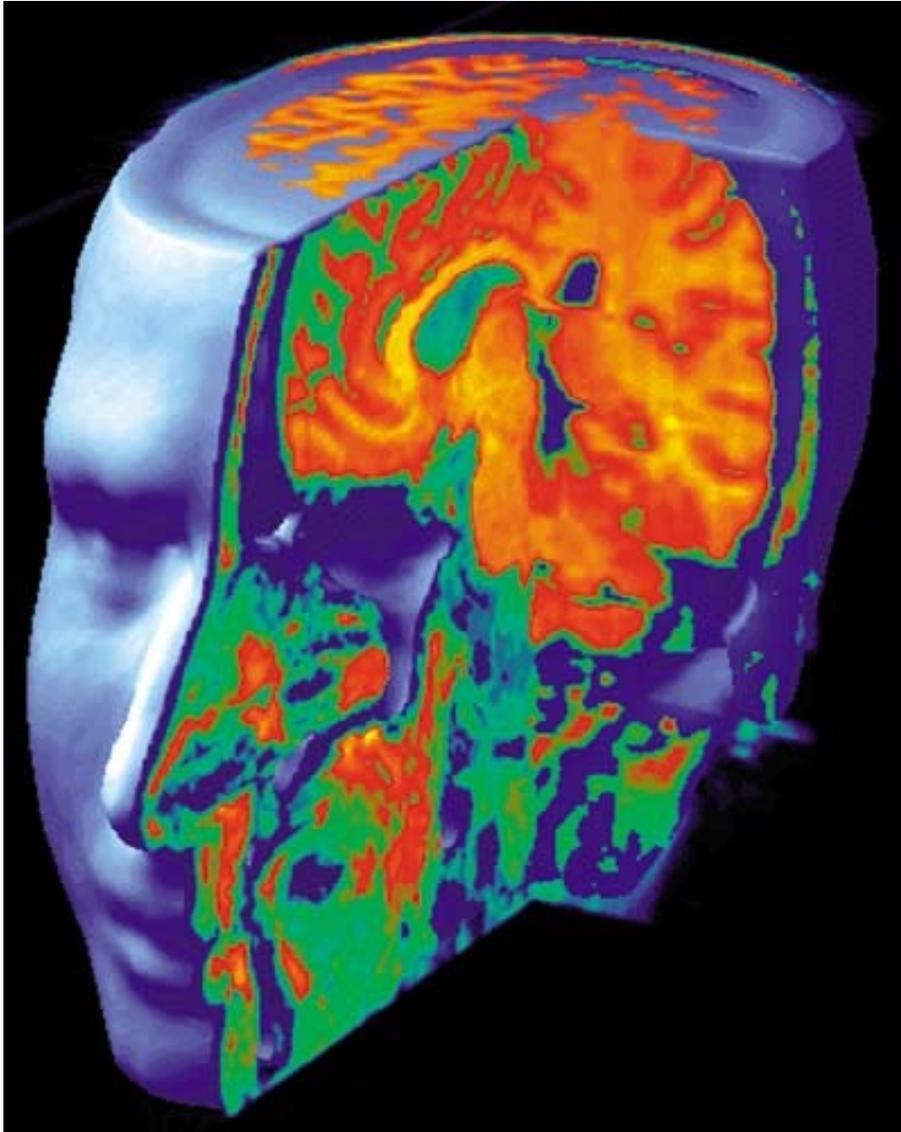


Deeper learning



Deeper learning occurs when knowledges and understanding are internalised and automatized in ways which enable individuals to demonstrate their **own understanding** in different ways and **transfer** their learning to other contexts.....

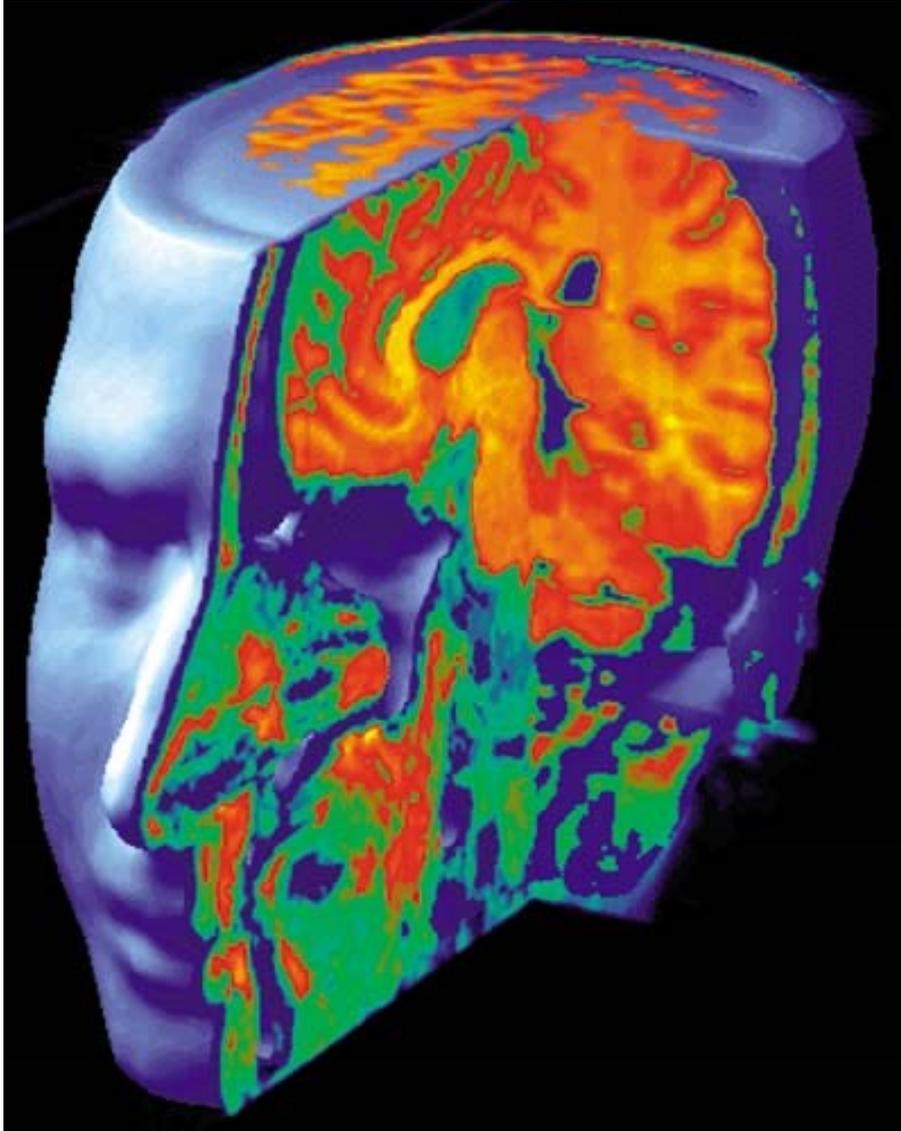
Language as Learning Tool



Cognitive tool
for constructing
concepts

**Meta-cognitive and
linguistic tool**
for learning how to learn
[always remember
linguaging is a verb]

Language as Learning Tool

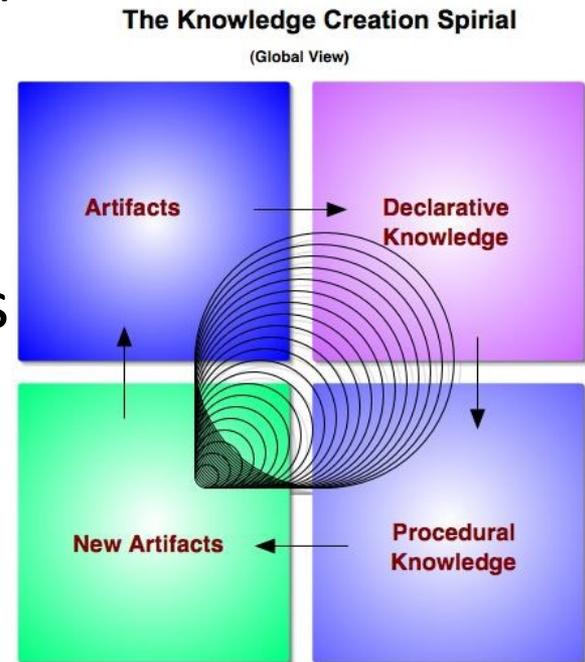


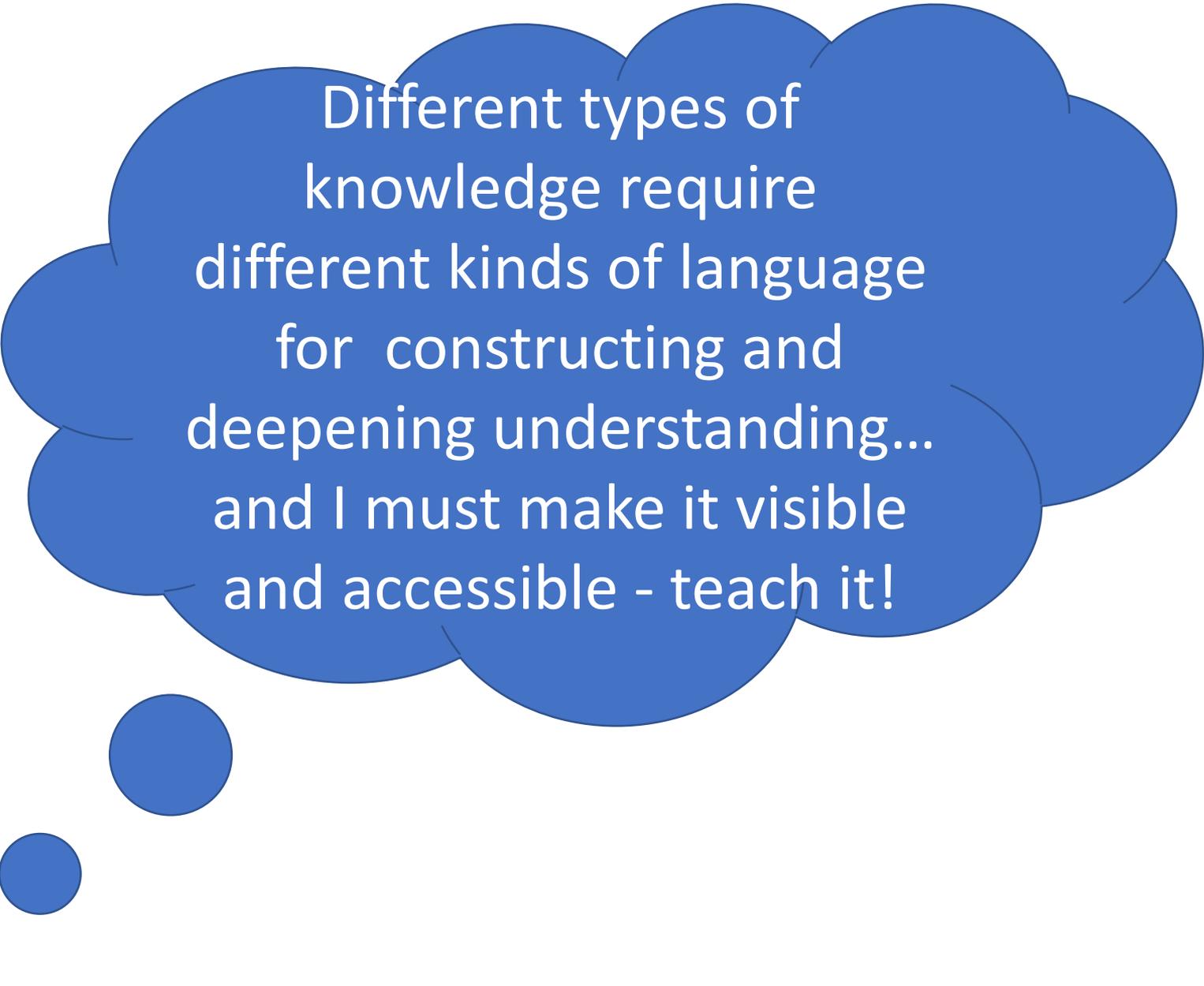
For **social connectivity** and intercultural understanding

As the **object** of learning ~ making literacies transparent, accessing languages for pluriliteracies

Knowledge isn't just facts!

- **Factual** knowledge about
- **Conceptual** deeper knowledge about
- **Procedural** how to (applied)
- **Meta-cognitive** strategies





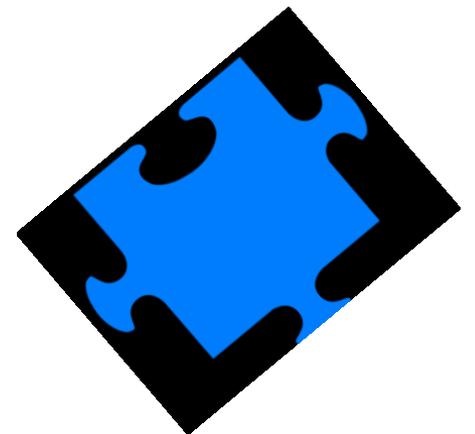
Different types of
knowledge require
different kinds of language
for constructing and
deepening understanding...
and I must make it visible
and accessible - teach it!

**Language is not
about words...**

**words are
meaningless**



To
Language
is a verb



Quantum states...



http://youtu.be/d1tn56vWU_g

<https://www.youtube.com/watch?v=IOYyCHGWJq4>

Draw this concept.....

Jupiter is the largest planet in our solar system. Its mass is approximately 318 times greater than the Earth. Jupiter is so massive, you could take every other planet in the solar system and combine them all together, and the resulting body would still be only half the mass of Jupiter. Earth has an equatorial radius of 6,378.1 kilometres, whereas Jupiter has an equatorial radius of 71,492 kilometres.

Which literacies as a CLIL educator?

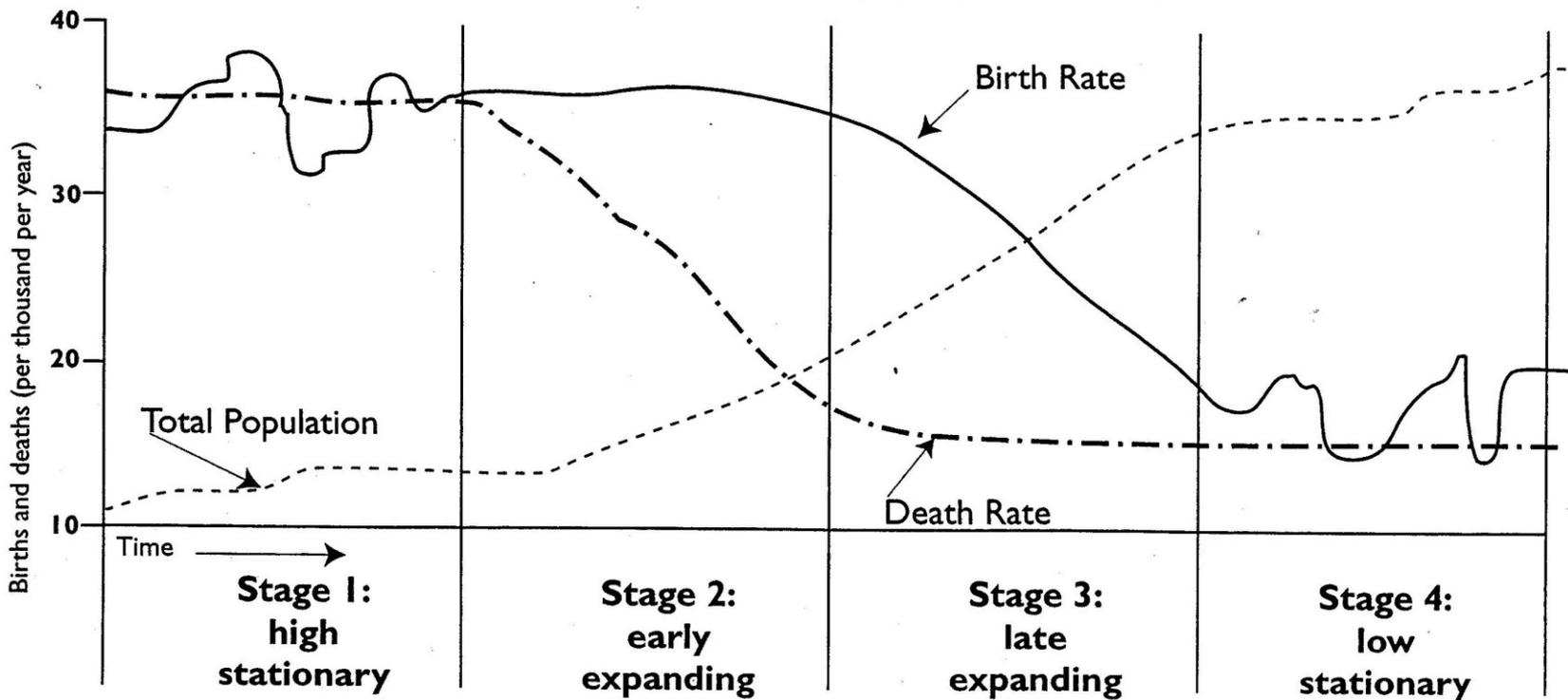
TEXT



And dealing with text across languages means....

- A shift from grammatical chronological dependence
- Looking at genre, register and style
- Taking meaning-making seriously and enabling authentic creativity with language
- Understanding what deeper learning means
- Connecting with first language literacies
- Using digital means to transform materials into resources
- Using other media and modalities to explore text
- Re-thinking tasks design and sequencing

The demographic transition model

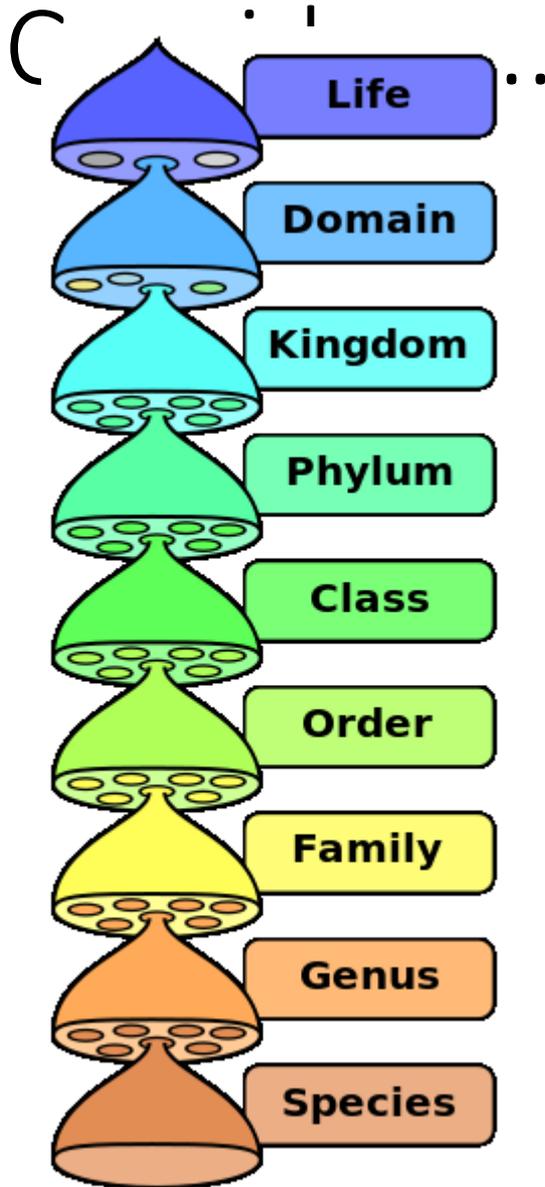


Source: Population—A Comprehensive Study, Population Concern

Living Graphs
Exemplar 1:
The
demographic
transition model

The demographic transition model

1. More houses are built
2. Children are warmers in bed at night because they have more brothers and sisters
3. There are more golden weddings
4. Grandparents are rare
5. People are encouraged to emigrate to the colonies
6. The public health inspector sees the new sewers completed
7. A mother sobs over the grave of the last of her six children died in a typhoid epidemic
8. Fewer children share a bedroom
9. Parents are starting to think more about family planning
10. Billy White loses his job as a grave digger



Biology is not plants and animals. It is language about plants and animals... Astronomy is not planets and stars. It is a way of talking about planets and stars (Postman, 1986:3)

Behaving like a scientist

NRC Framework 2011

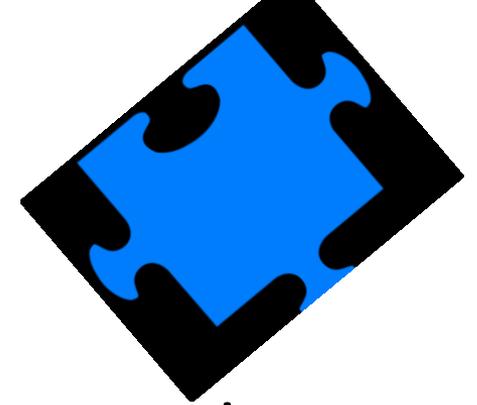
Identifying 8 science practices:

1. Asking questions and defining problems
2. Developing and using models
3. Planning and carrying out investigations
4. Analysing and interpreting data
5. Using mathematical and computation thinking
6. Constructing scientific explanations
7. Engaging in argument and discussion
8. Obtaining, evaluating and communicating information

Meaning Making: A Knowledge Pathway through History

	Text type	Social purpose
Chronicling history	Autobiographical recount	To retell the events of your own life
	Biographical recount	To retell the events of a person's life
	Historical recount	To retell events in the past, not necessarily of a person
Reporting history	Descriptive report	To give information about the way things are or were
	Taxonomic report	To organise knowledge into taxonomy
	Historical account	To account for why events happened in a particular sequence
Explaining history	Factorial explanation	To explain the reasons or factors that contribute to a particular outcome
	Consequential explanation	To explain the effects or consequences of a situation
Arguing history	Analytical exposition	To put forward a point of view
	Analytical discussion	To argue the case from two or more points of view
	Challenge	To argue against a view

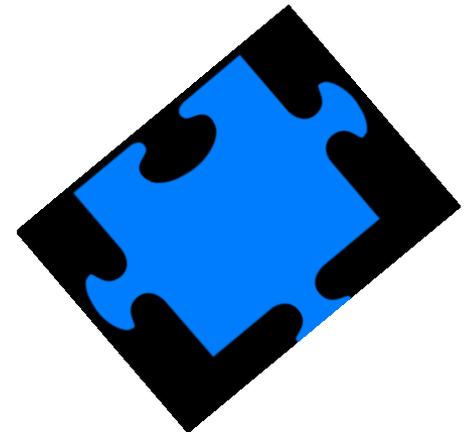
Read this!



Subject-specific literacies develop with a growing ability to express or verbalize thematic, subject specific concepts or conceptual knowledge in an appropriate style using the appropriate genre and genre moves for the specific purpose of communication. This process is languaging i.e. using language(s) to mediate increasingly cognitively complex acts of thinking and understanding i.e. “the process of making meaning and shaping knowledge and experience through language” (Swain, 2006).



To
Language
is a verb



The Language Triptych

Language **of** learning



Foreign Language
Learning and Using

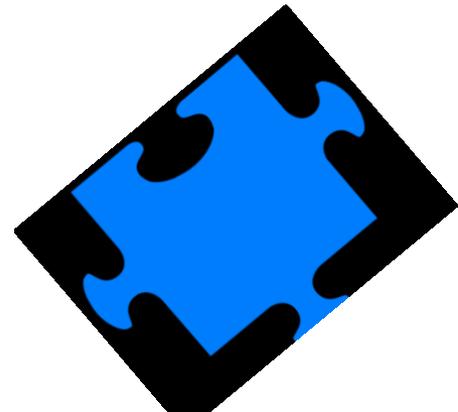
Language **for** learning

Language **through** learning

Subject Literacies

- Subject literacy *involves the use of reading, reasoning, investigating, speaking and writing required to learn and form complex content knowledge appropriate to a particular discipline.*
- Subject literacy is interpreted as *a path towards critical thinking and knowledge application as well as towards social participation*

McConachie (2010: 16)



Subject-specific Literacies

a new emphasis

- Shanahan & Shanahan (2011) reject the idea that basic reading skills automatically evolve into more advanced skills over time. Instead, they make a case for transparently teaching disciplinary literacies which high-light the differences in the language. This draws attention to tools used by experts in those disciplines to construct and communicate knowledge and in the ways that individual disciplines construct and interpret the texts

Subject-specific Literacies

a new emphasis

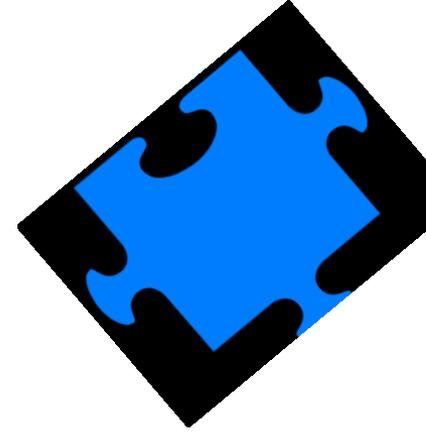
These ideas challenge widely held assumptions about how we build knowledge and how we develop problem-solving skills. They refute the following notions:

- that knowledge can be accessed and constructed through a set of generic skills;
- that learning is quasi-independent of the underlying subject matter;
- that such skills can automatically transfer across different tasks and content areas and
- that they will enable learners to solve whatever set of problems they may encounter in the future lives.

Importance of visibility

- Academic literacy must be made visible across all sectors of learning, which relates directly to subject learning. The teaching of academic literacy to all learners especially those in multilingual contexts relating to school subjects is essential. It is very different from everyday language
- The continuum from everyday spoken language to highly specific subject-specific written language
- How can we teach a subject without making academic literacy explicit?

(Gibbons 2018)

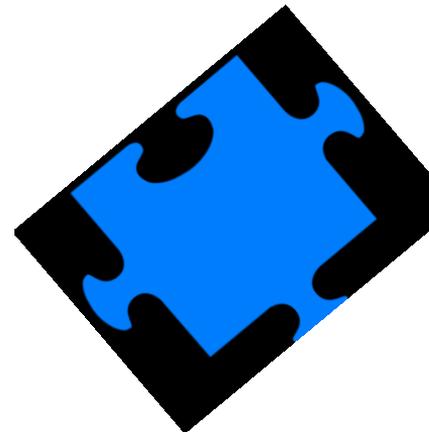


**Academic
Language is
nobody's mother
tongue**



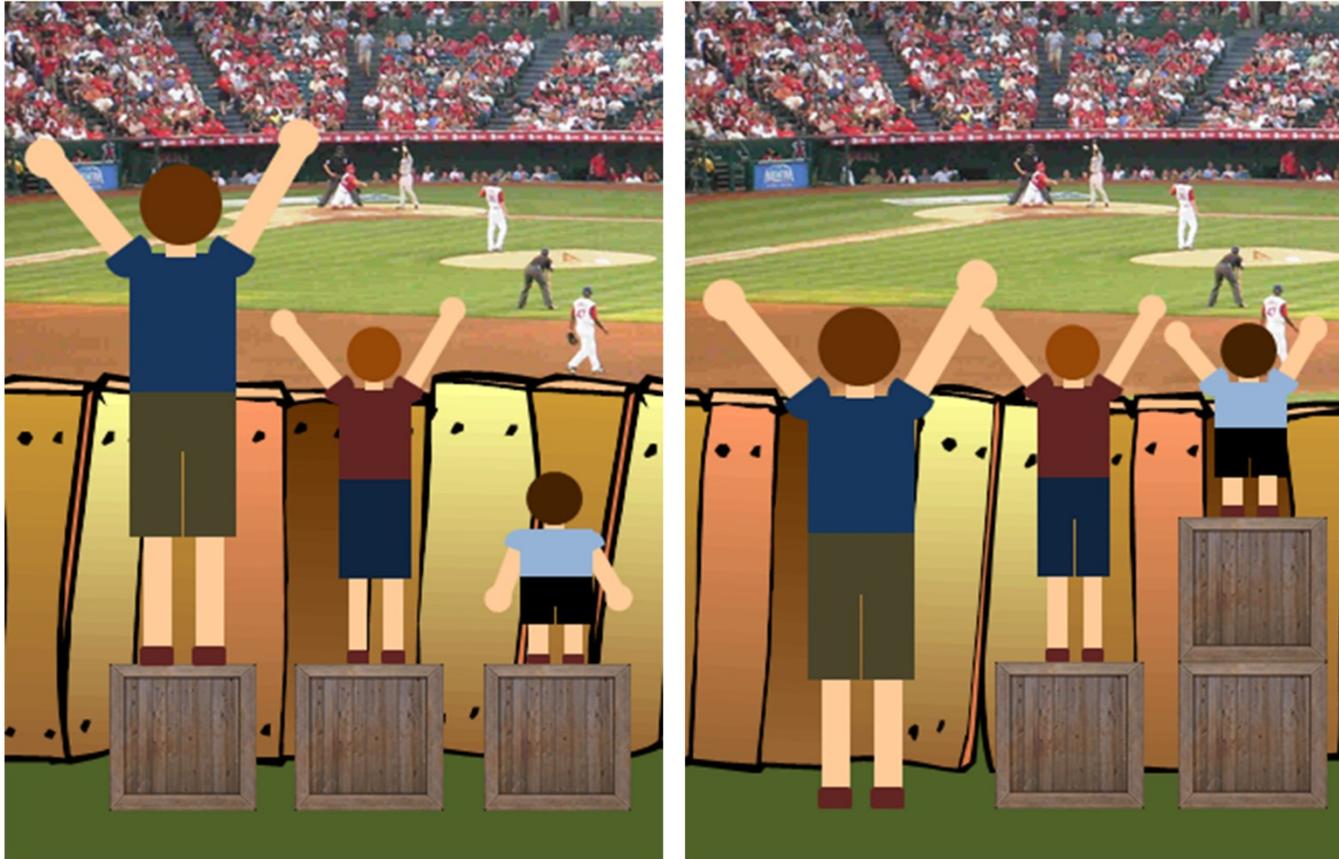
Explicit teaching and learning of academic subject literacies for all learners is a *leveller*, *enabler*. It provides access to deeper learning regardless of the background of individuals.

Get languaging!



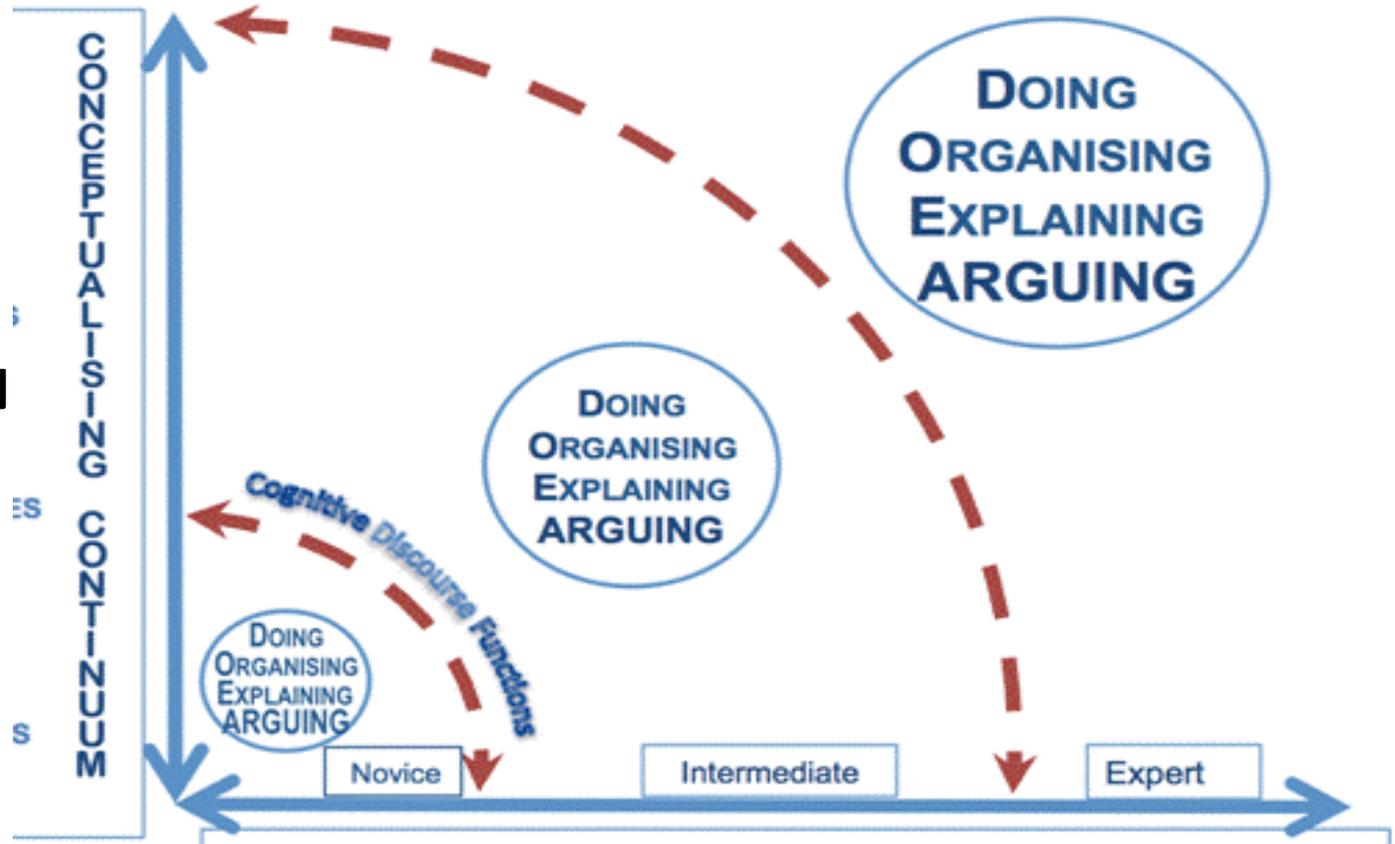
(Language)

Literacies as a Leveller



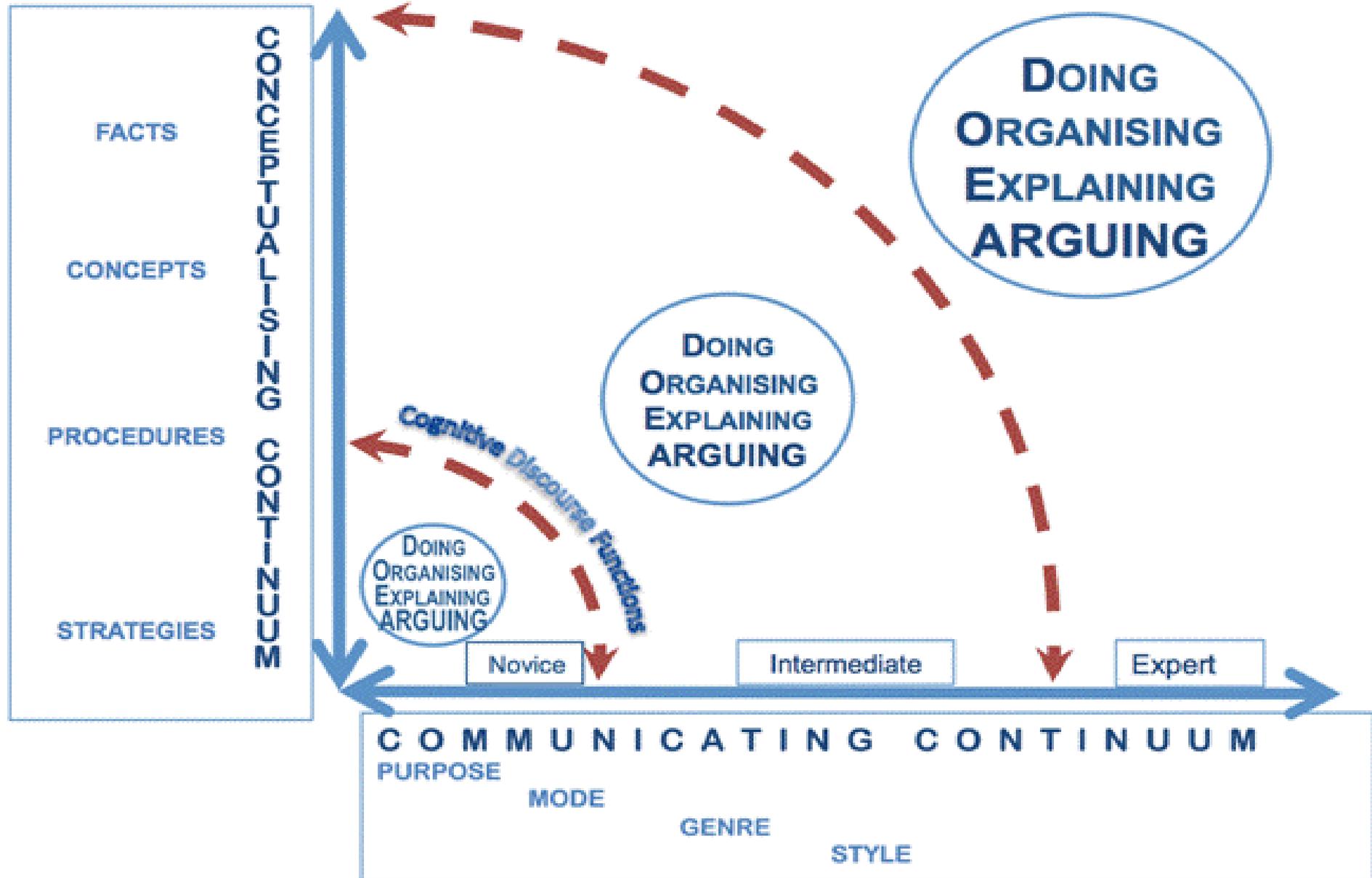
Mapping Pluriliteracies development

(subject)
**KNOWLEDGE
CONSTRUCTION**



**LANGUAGE PROGRESSION
L2 AND L1**

Mapping Pluriliteracies Development



Maximizing Meaning Making Knowledge Pathways

'doing science'

(procedure, procedural recount)



'organizing scientific information'

(descriptive and taxonomic reports)



'explaining science'

(sequential, causal, theoretical, factorial, consequential explanation & exploration)



'arguing science'

(exposition and discussion, criticality)

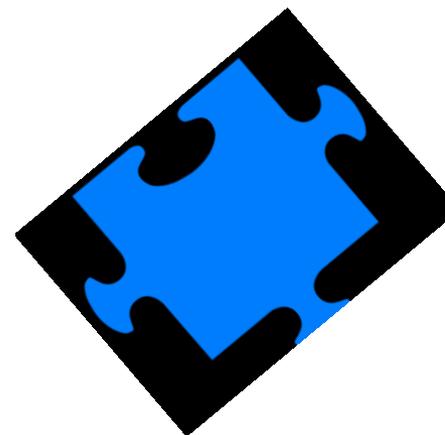
(Veel 1997)

So what does this mean for us?

Planning for four major pupil activity domains along the knowledge continuum – all of which have different literacy demands:

1. **Doing**/enabling the subject (Science, Drama)
2. **Organising** and **documenting** it
3. **Explaining** understanding to others
4. **Critiquing** (arguing, discussing, justifying)

.....which can be expressed in different ways



KNOWLEDGE AND ACTIVITY DOMAINS IN SCHOOL SCIENCE	SPECIFIC GENRES	PURPOSES
Doing science	1 Procedure 2 Practical report	1 instructs someone in how to make or do things 2 provides a recount of the method undertaken in an experiment, as well as the results and the conclusions
Organising scientific information	Reports 1 descriptive 2 taxonomic	1 describes features of places or physical phenomena 2 describes different kinds of physical features
Explaining events scientifically	Explanations 1 sequential 2 causal 3 factorial 4 consequential 5 theoretical	1 explains a physical phenomenon by presenting the events producing the phenomenon in chronological order 2 explains the sequence of an event or phenomenon with reasons included 3 explains the multiple factors that contribute to a particular event or phenomenon 4 explains the effects or consequences of a particular event or phenomenon 5 a theoretical explanation illustrates a theoretical principle
Arguing aspects of science	Expository genres 1 argument – analytical argument – hortatory argument 2 discussion	1 analytical arguments present on an issue in order to persuade the reader/listener to agree with a particular point of view. Hortatory arguments both present and try to persuade the reader/listener to take some action 2 presents the case for more than one point of view about an issue

Starting point:

Identify cognitive discourse functions and language patterns

Naming

Sequencing

Describing

Sorting from known criteria

Asking questions

Comparing and contrasting

Classifying

Explaining

Hypothesising

Generalising

Reasoning

Problem solving

Analysing

Ranking

Evaluating

Its not just about new vocabulary

Consequences of absent discourse

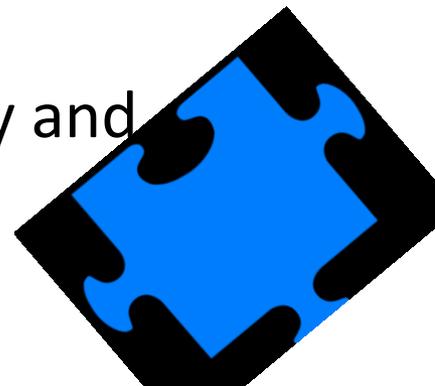
Considering the fact that teaching subject specific concepts and their respective meaning extension is a central aspect of content teaching, definitions are a surprisingly infrequent phenomenon in the data. In 17 out of 43 lessons (40%) no instances of defining could be identified.

It may be unsurprising that the lexemes 'definition' or 'define' do not occur at all in the entire corpus. And since the genre is not even named, it is equally unsurprising that there is no meta-talk about it. The written materials used during the lessons did not contain any definitions written definitions can also be dismissed.

Dalton-Puffer, 2004:32

Dynamic Assessment

- The basic premise of dynamic assessment is that it is important to assess students' potential to learn rather than measure what they have just done
- As well as being a way to offer direct support to the learner, dynamic assessment can inform the teacher about topics and skills that many students are finding difficult and so help the process of re-designing and improving the teaching.
- It can also motivate learners to reflect on their learning journeys and decide on which skills they need to improve. It is particularly valuable for developing skills of reasoning, problem-solving, decision making, leadership, creativity and literacy



Austin's Butterfly



<https://www.youtube.com/watch?v=hqh1MRWZjms>

Revisiting Key Ideas

Language at the core of curriculum

- Language is a **thinking** tool (cognitive)
- Language enables us to **construct knowledge** and **make meaning** (semiotics)
- Language as a **mediating** tool (socio-cultural, scaffold our own and others' learning)
- Language is a **communication** tool (talk)
- Language enables us to **articulate our thinking** with ourselves and others (dialogic, co-construction)
- Language **shapes the way we think** (cultural capital)
- Language enables us to talk and talking for learning involves developing strategies and techniques for creating and co-constructing **dialogic teaching and learning**.

Let's Talk Together

The background features a central white starburst shape with several green rays extending outwards. Below the rays, there is a cluster of colorful circles in shades of yellow, orange, red, and green.

Argumentation and dialogue are not simply
alternative patterns of communication; they are
principled approaches to pedagogy
(Wolfe, 2008)

Pluriliteracies Approach

1. Be language aware not only of your learners but of yourself (linguistically and culturally)
2. Be language aware of the specific literacy demands of your topics/subject discipline (cognitively, culturally and communicatively)
3. Be inclusive -different topics/disciplines have very different cultures, very different discourses which become increasingly nuanced i.e. progression....
My awareness, my planning!

Pluriliteracies Approach

4. Be spatially aware.....how does the physical, cognitive and social environment YOU create with your learners impact on learning?
5. Be aware of the role spatial, visual and kinaesthetic literacies play in your classroom ecology

What is a pluriliterate learner?

A pluriliterate learner is one who has understanding of how their learning happens, how language makes thinking and learning work through experiencing culturally-aware meaning-making, problem-solving, and being creative in more than one language – a right for **all** learners – whatever age, whatever stage.

Why SWYK is so important?

Languaging happens when learners express their understanding of (subject-related) concepts in their own words (and in different modes) without simply repeating teacher or textbook language. Enabling *languaging* by gradually increasing the sophistication of appropriate styles, registers and genres, enables both teachers and learners to monitor learner and the quest for deeper learning. In a CLIL context, learners are explicitly provided with tools to language in more than one language.

Show What You Know happens when learners are encouraged to creatively use a games-based approach to demonstrate their understanding. This can take the form of *languaging* in different modes. It can also take the form of visual representations, movement and embodied learning. This is why SWYK is at the core of PbC. It can be argued that it is a more **inclusive** way of encouraging **all** learners whatever their age, stage and language competence to self-assess, express their meaning-making and demonstrate their understanding in alternative ways to more traditional forms of assessment.

Design Principles [1]

Theories and principles for developing a Pluriliteracies and games-based approach to CLIL. These principles, which guide practice-based approaches to dynamic formative assessment using SWYK:

- are embedded in *subject disciplines or thematic strands*
- promote *linguaging* for understanding
- promote *thinking skills* for language using/arguing/
- promote *personal growth* – learning ecologies
- promote *pluriliteracies and games-based* approaches
- promote tasks which take account of Prior Learning Positioning Stimulus Scaffolding
- are *inclusive* and take account of all learners
- promote the design of *Learning Events* which involve creative tasks design and sequencing leading to specific **Focus Tasks** (games-based)
- SWYK will be known as the Focus Task since learners demonstrate their learning in a range of modes, media and languages

Design principles [2]

- **Learning conversations** are fundamental to the learning space (i.e. where learners and their teachers discuss not only the subject of their learning (new knowledge, skills etc) but how they are learning and what works for them (mentoring learning)).

If the learning ethos is one of growth and transparency, learners have to be involved in co-constructing the learning environment. One such example – the co-construction of rubrics which will be used for their own assessment (guided by the teacher). Such criteria have to be owned by the learners and the teachers

- Learning conversations are therefore embedded in all learning events.

Question: how can learners be prepared to engage in these Learning Conversations?

Recommended read: Fullan and Langworthy *A Rich Seam* (2014)

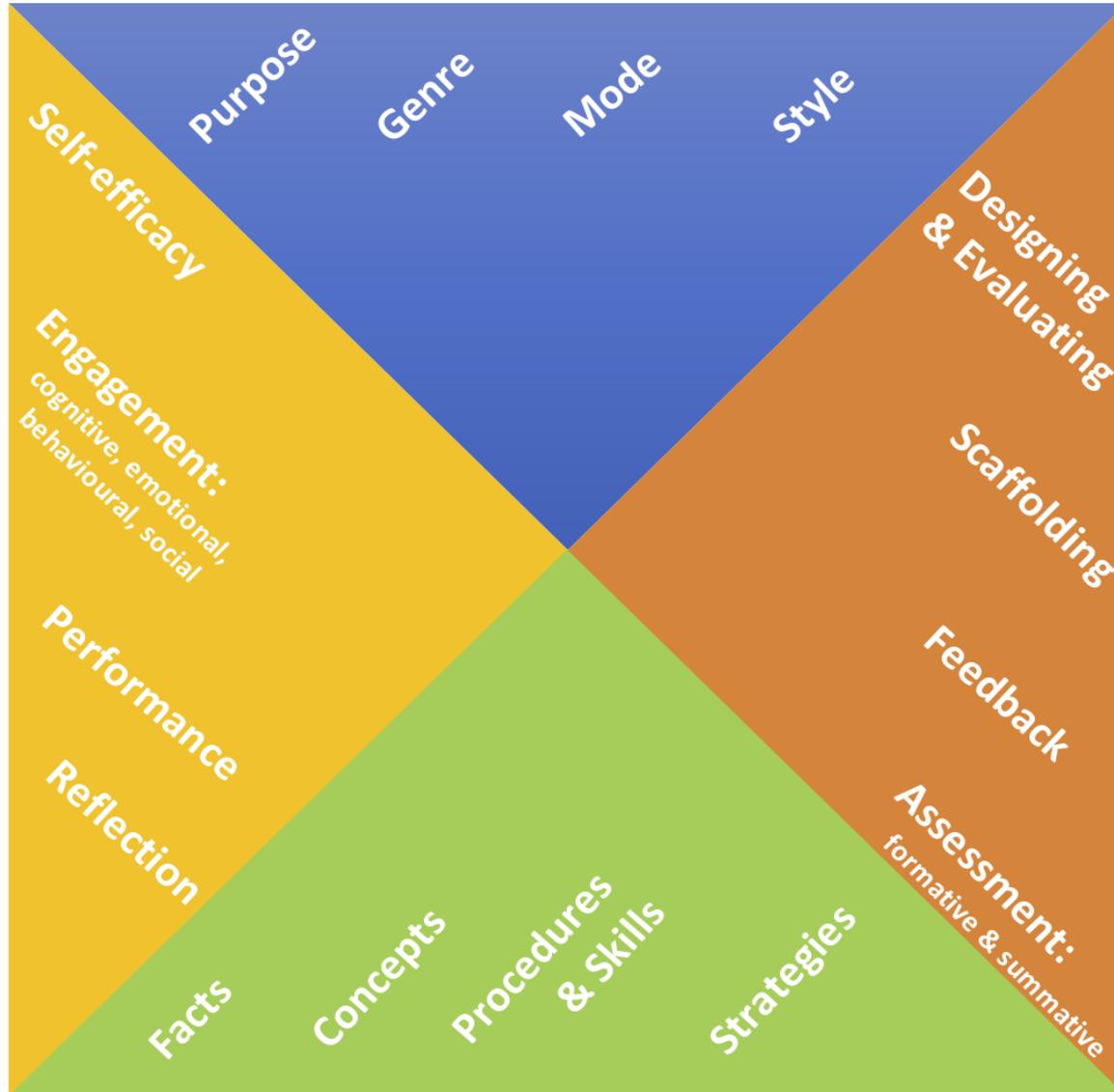
https://www.michaelfullan.ca/wp-content/uploads/2014/01/3897.Rich_Seam_web.pdf

COMMUNICATING CONTINUUM

P
E
R
S
O
N
A
L

G
R
O
W
T
H

C
O
N
T
I
N
U
U
M



M
E
N
T
O
R
I
N
G

C
O
N
T
I
N
U
U
M

CONCEPTUALISING CONTINUUM

**PbC Framework for designing Learning Events
mentoring learning & inclusive games-based classroom
practices**

**1. Subject, theme
or topic**

✓ **Check out**

**2. Pluriliteracies
principles (including
games-based learning)
and dynamic
assessment**

**7. Interweaving tasks
for progression &
SWYK**

**Deeper learning
PbC
reflections on
assessing
learning**

**6. Language/s
of, for and
through learning**

**3. Selecting the
Focus Task
(FT)**

**Dynamic Assessment
Summative/formative
Focus task: SWYK**

**4. Knowledge
pathways linking
concepts and
tasks**

**5. Other task
design &
sequencing
ending with FT**

Creating ecological spaces

Learning
Conversations

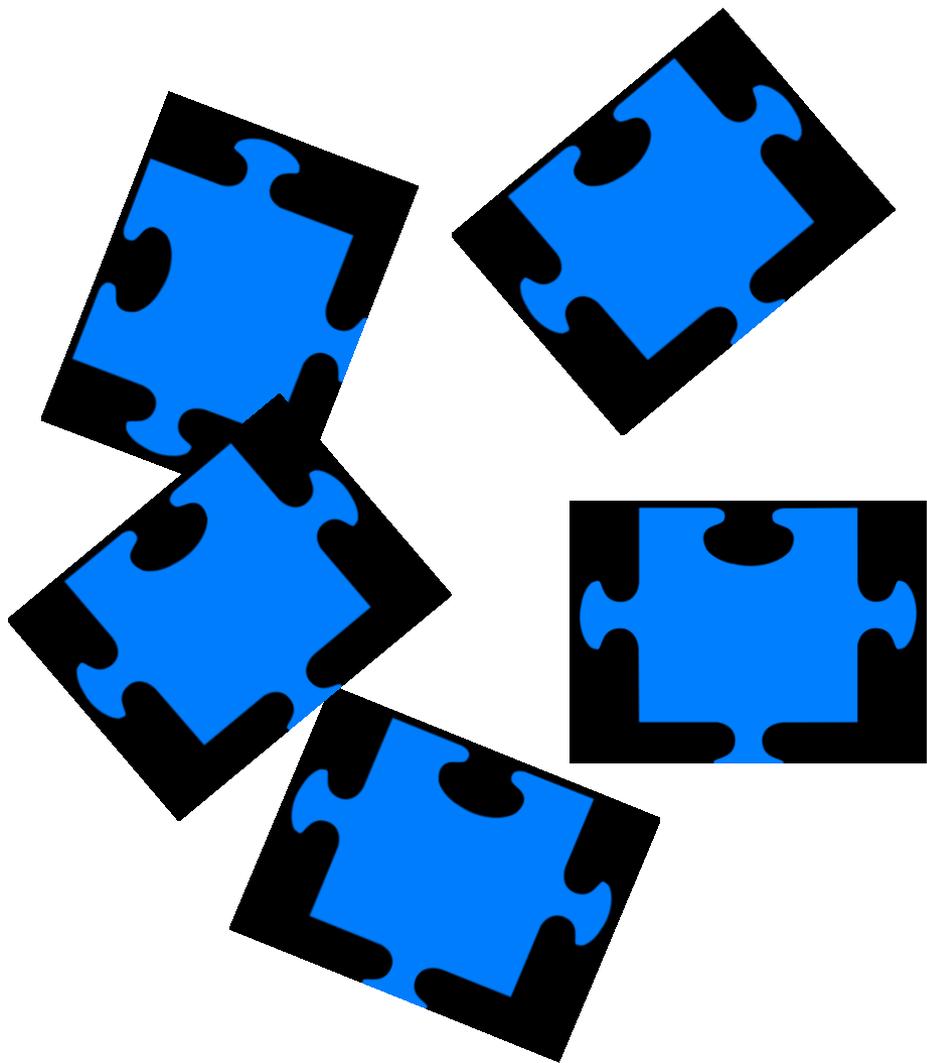
Learning
Conversations

Learning
Conversations

Learning
Conversations





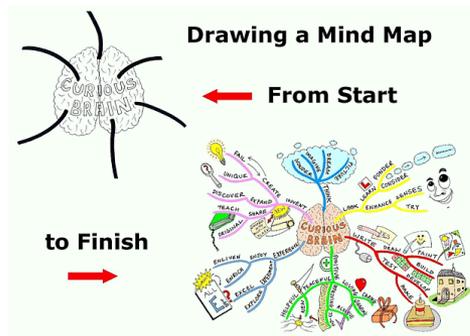
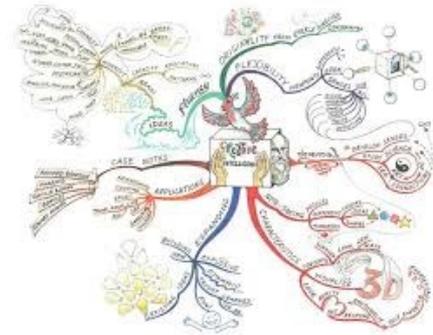
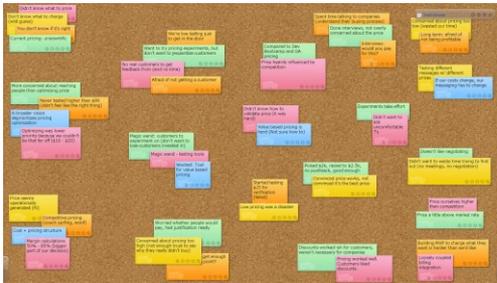




The Infinity Jig Saw

Where next?

Create your own design maps for a Learning Event





Thank you
Do.coyle@ed.ac.uk

Transformative Learning

- Learning through growing: critical reflection; professional relationships; and professional activism (Burns 2009, Mezirow, 2000).
- Activist teachers are committed to social justice and seeking to address diversity through creative ways of enabling learners to access deeper learning
- Transformative Learning involves complex cognitive processes (Harris, Moore and Farrow, 2008)
- Transformative learning is about who we are