

Futures Thinking for Today's Actions



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Summary of work packages

- 1. A systemic review of the literature relevant to L2 HEI study programmes.
- 2. A best practice guide for implementing CLIL
- 3. Developing work modules adjusted and developed by the partners to test and refine best practice, alongside ensuring intercultural and digital aspects embedded in the CLIL experience. i.e., methodology, collaboration between content and language teachers, and materials development.

Roles of Languages
Accessibility, EDI
Interculturality

So, where to next?

Provocations

- 'Best' practice isn't what we do but who we are
- Flourishing and wellbeing require ecological learning design and planning
- Deeper learning is complex CLIL spaces provide opportunities
- Linguistic progression is no longer enough in any (CLIL) classroom
- Pluriliteracies theories can be transformed into multilingual classroom practices for very diverse learners
- Teachers and students need to own their learning embracing adaptation to repertoires and identifying urgent changes needed

The Problem You Think You Have Is Never the Real Problem



Solutions do not exist...

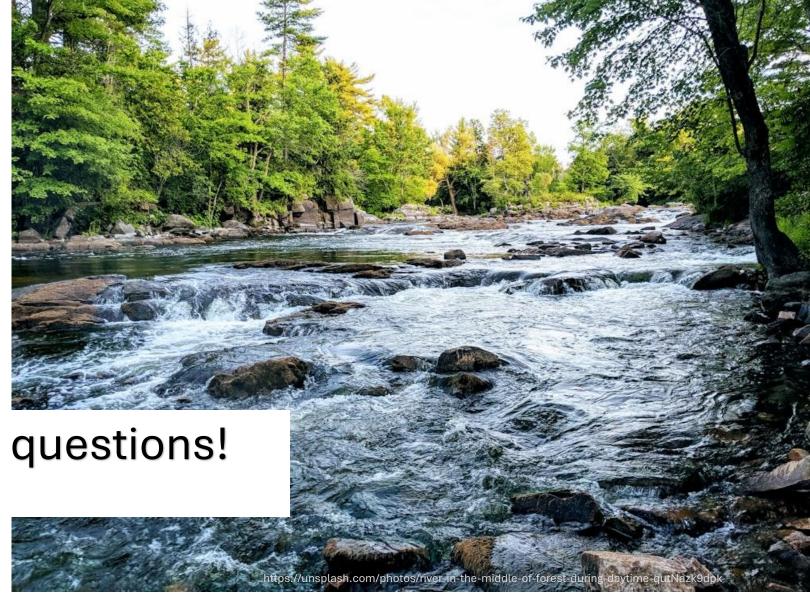
Stop asking the same questions!

(Lemke & Lin 2022)

Addressing issues is exciting, positive and needs attention from multiple perspectives

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Addressing issues is exciting, positive and needs attention from multiple perspectives

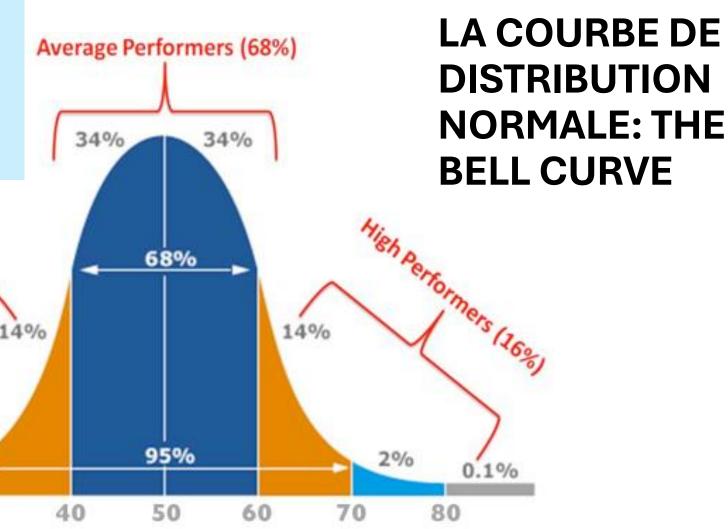
Diversity is not a pedagogic inconvenience which labels individuals, underpinned by flawed measures of ability and competences

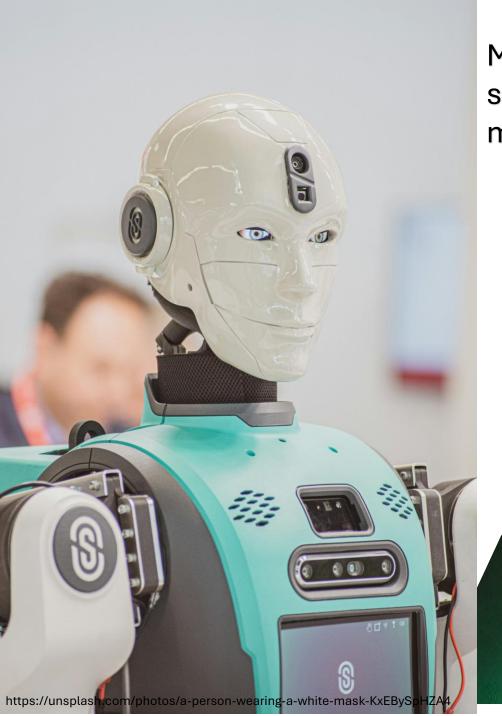
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Multimodality supports multilingualism



De-siloisation of conceptualising classrooms and what happens in them



Hard line de-siloisation? From both educator & student perspectives

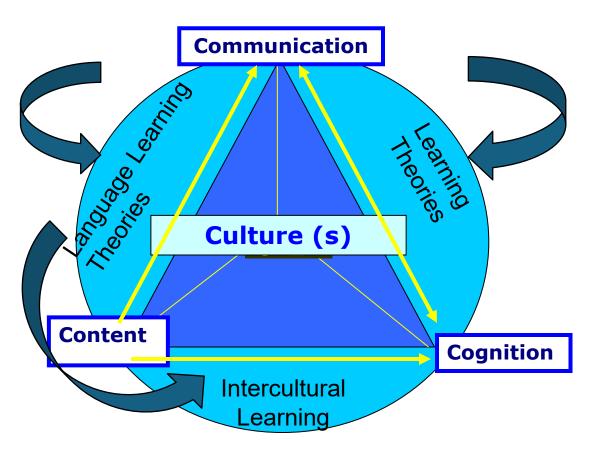
A silo mentality can reflect a narrow vision. People are so bogged down in their daily chores that they never see the bigger picture or see themselves as having a critical role in that bigger picture. Or they may be utterly unaware of the value to others of the information they're sitting on.



The problem with models.....

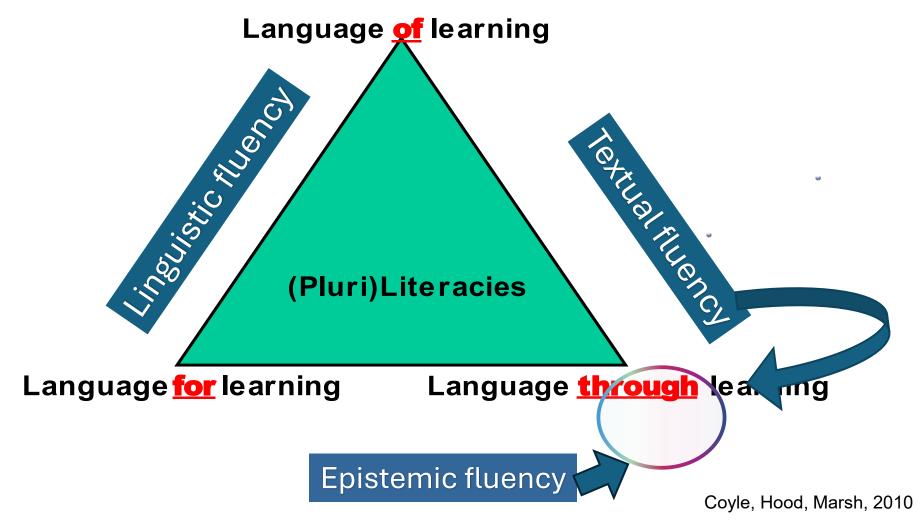


The 4Cs Conceptual Framework



Towards holistic views of the curriculum

Reconceptualising Language & Learning for Meaning Making



The Language Triptych

*Meeting new language
Manipulating new language
Making it my own

New language that emerges through learning (implicit, not planned for)

New language coming up in discussions

New language while giving / receiving feedback

New language for expressing new ideas playing/ experimenting with language

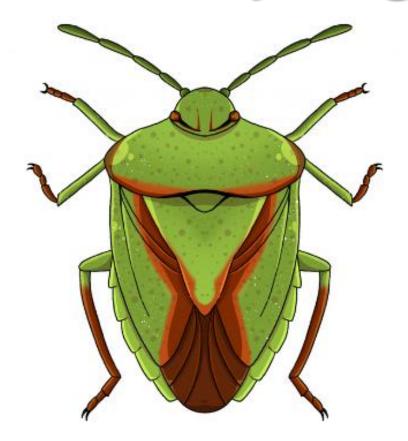
New language making connections with first language

https://unsplash.com/photos/a-statue-of

Legacy pedagogies are powerful

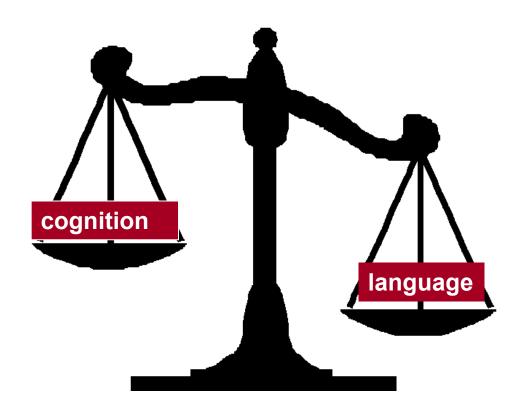
Legacy versus localized pedagogies as non-adversarial or judgmental: context-sensitive & culturally-rich & content-relevant opportunities for addressing rapid changes needed to guide classroom practices

The Binary Bug



spreads Content and Language Isolated Learning

Problematising bilingual learning approaches





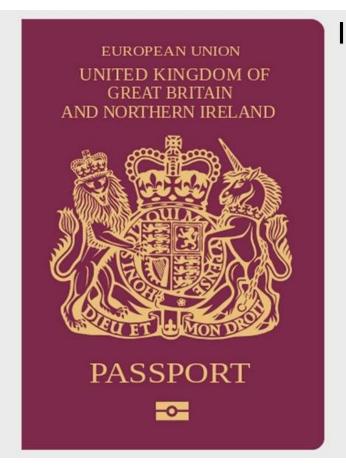
'Best' Practice! Quality learning











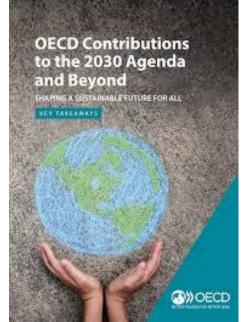
Identity and control?



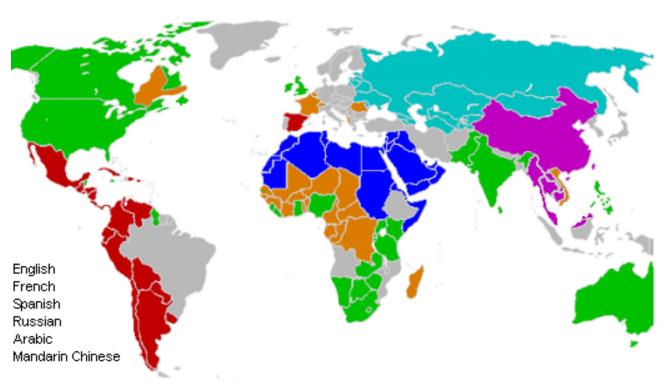
Flourishing and wellbeing

Wellbeing is a complex, multifaceted construct understood differently across various disciplines and contexts (Mead et al., 2021; Alexandrova and Fabian, 2022). Broadly it can be defined as feeling good and functioning well both intrapersonally and socially (Deci and Ryan, 2008; Keyes, 2013).





Conflict between legacy and rapid turns and changes impact present & futures thinking on classroom teaching and learning.....



- Global concerns
- Multilingual and multicultural learning spaces
- Policy and political imperatives
- Unprecedented digital advancement
- Fit-for-purpose education

and if they don't, they should!



Academic Language is nobody's "mother tongue"/L1

So...?

Holistic

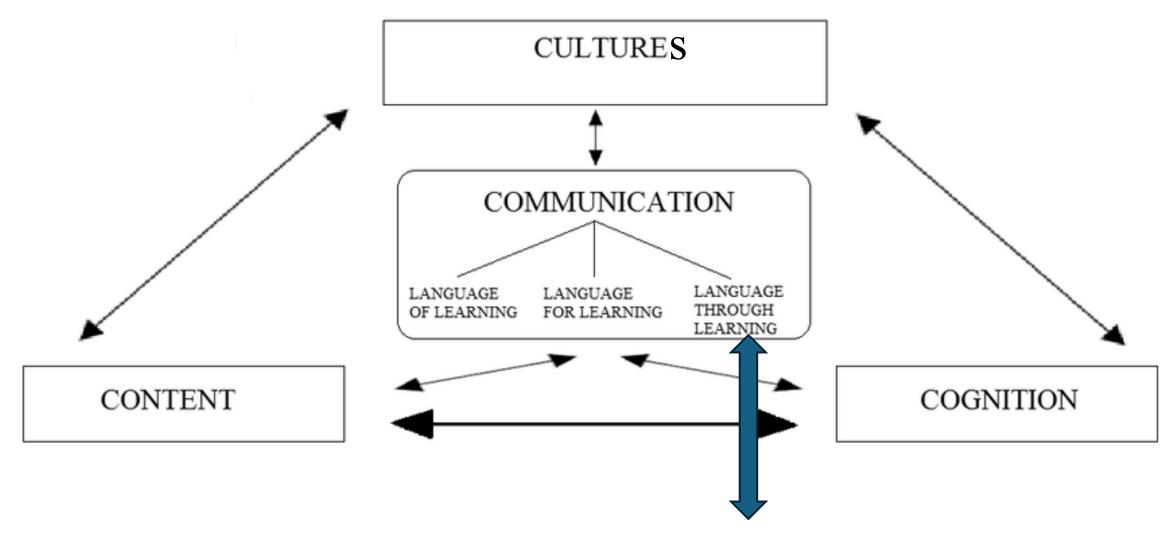
Ecological

Promoting Growth Mindsets

"When teachers were teaching for understanding and giving learners feedback in a way that grew their understanding and were giving them a chance to revise their work in order to demonstrate their improved understanding - that's when they were passing on their growth mindsets" (Dweck 2016).



Multilingual framework for co-constructed curriculum learning that is context-sensitive



Literacies (textual & linguistic fluency)

Language relating directly to content e.g. terminology, key phrases and related grammar. Usually taught by both language and subject teachers.

Language of learning

meaning making

carry out tasks and work independently – such as language needed to create an

Opens the door to pluriliteracies

As learners deepen their subject/topic knowledge and skills, they need to deepen their understanding of the language needed to build conceptual meaning. Language of learning is not enough. The language which bridges conceptual knowledge and linguistic progression emerges for each individual through the tasks which draw attention to the language needed. You will not find these listed in textbooks: these revolve round different ways of seeing language as a learning tool e.g., conitive discourse functions (CDFs).

_anguage for learning

Language through learning

The Language Triptych

successfully in the classroom.

their learning

an activity. This

language enables

learners to manage

Language needed to

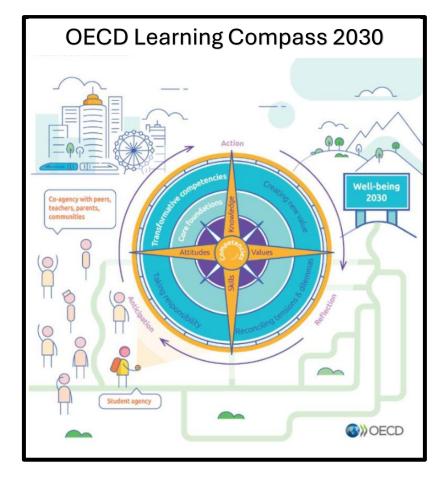
enquiry, group work or

Coyle, Hood, Marsh, 2010

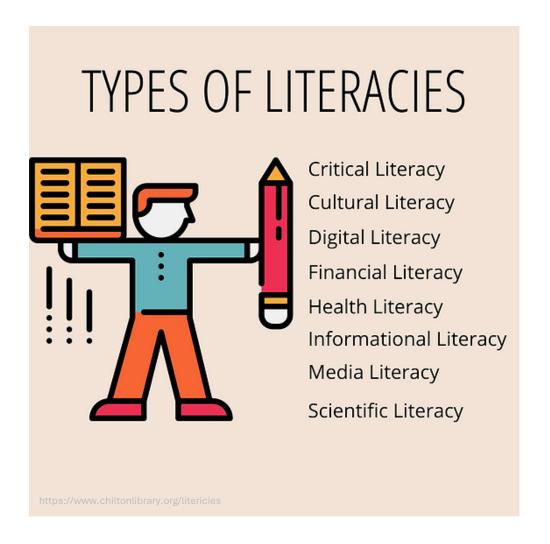
Over 20 years ago – UNESCO declared the decade of literacies

Literacy is the ability to identify, understand, interpret, create, communicate and compute, using printed and written materials associated with varying contexts. Literacy involves a continuum of learning in enabling individuals to achieve their goals, to develop their knowledge and potential, and to participate fully in their community and wider society

(UNESCO, 2004; 2017)



Overused and misunderstood?







Literacy is not limited to improving capacity to deal with increasingly complex knowledge and skills in L1

Literacy empowers the individual to develop capacities of reflection, critique and empathy, leading to a sense of self-efficacy, identity and full participation in society."

(EU High Level Report of Experts on Literacy, 2012:21)

Pluriliteracies - connecting the micro to the macro in bilingual contexts Communicating

Demonstrating understanding

Mechanics (what we do)

Generating & sustaining learner commitment, achievement & well being



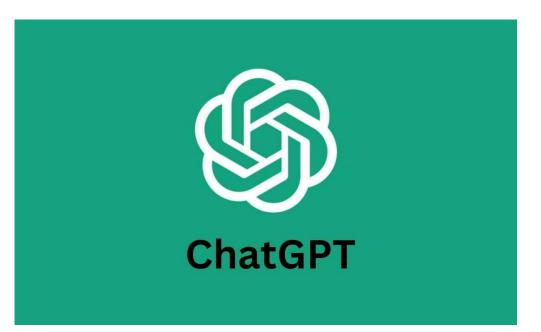
Conceptualising

Building knowledge & refining skills

Drivers (who we are) **Mentoring**

Learning & personal growth

Transforming the theoretical principles into real classroom practice







Al Literacy - tertiary education

Tertiary students need a combination of technical, analytical, and ethical skills to work critically with AI, focussing on:

- **Data Literacy** Understanding how data is collected, processed, and analyzed is crucial. Students should be able to assess data quality, biases, and the implications of data-driven decisions.
- **Critical Thinking** AI can generate impressive results, but students must question outputs, recognize limitations, and evaluate sources rather than accepting AI-generated content at face value.
- **Ethical Reasoning** AI raises ethical concerns, from bias in algorithms to responsible AI use. Students should be equipped to discuss fairness, accountability, and the societal impact of AI-driven technologies.

Al Literacy – Tertiary Education

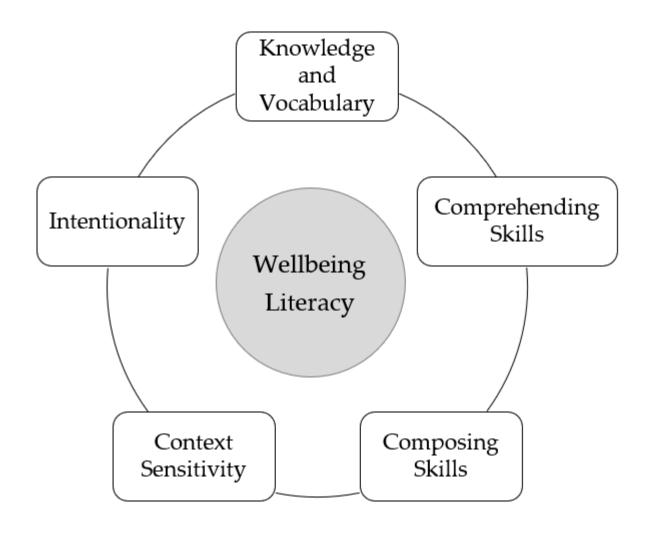
- **Programming & Computational Thinking**—basic coding skills (e.g., Python) and an understanding of machine learning concepts help students engage more meaningfully
- Interdisciplinary Understanding AI intersects with law, philosophy, business, health, and more. A broad perspective allows students to apply AI critically across different domains.
- Communication & Al Literacy Being able to explain Al concepts clearly and work collaboratively with both technical and non-technical teams is increasingly important.
- Adaptability & Continuous Learning AI is evolving rapidly. Students should develop a mindset of lifelong learning to keep up with advancements.

Lindsay Oades, Rachel Colla and Laura Mossman University of Melbourne

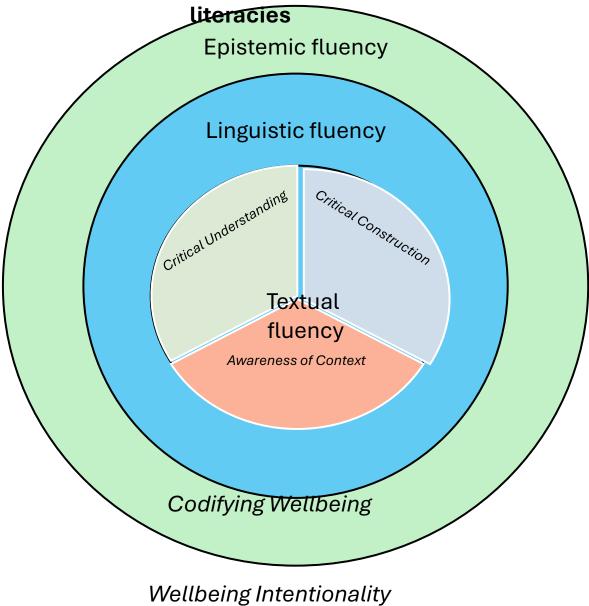
Wellbeing integrated learning design framework: a multilayered approach to facilitating wellbeing education through learning design and educational practice

Oades, Lindsay & Aaron, Jarden & Hou, Hanchao & Ozturk, Corina & Williams, Paige & Slemp, Gavin & Huang, Lanxi. (2021). Wellbeing Literacy: A Capability Model for Wellbeing Science and Practice. International Journal of Environmental Research and Public Health. 18. 719. 10.3390/ijerph18020719.

Wellbeing Capability Model (positive psychology)



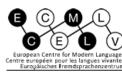
Pedagogies for flourishing mindsets through wellbeing



Plurliteracies Teaching for Deeper Learning Pedagogic Concepts (Coyle & Meyer, 2021)		Wellbeing Literacy Model Components (Oades et al., 2021)	
Epistemic Fluency (What does it mean?)	Linguistic Fluency (What are the building blocks?)	Codifying knowledge	Intentionality to be/become well
	Textual Fluency (How is it mobilise d?)	Critically Understanding multimodal texts	
		Critically Constructing multimodal texts	
		Critical contextual awareness	

Pluriliteracies for wellbeing require deeper learning in the clil, bilingual classroom **Meaning Making** through critical literacies using primary and secondary discourses **Texts** fictional and non-fictional (literary and non-literary) Language Function Deeper Understanding & Form Plurimodality **Cultural Consciousness Empathy & Compassion** & Genre-Specifity Textual & Epistemic

Fluency





Medlock, P., & Casey, M. (2018). Critical Literacy Pedagogy: Establishing the Factors of Critical Literacy Instruction Through a Mixed Methods Approach.

Critical Literacy Pedagogy is:

Relevant

 Designing the class and curriculum to be relevant and inclusive of students' identities, lives, experiences, cultures, and current events.

Reflexive

 Acknowledging, exploring, and/or learning about one's biases, as well as how to bracket those biases.

Deconstructive

 Deconstructing or dissecting texts, videos, or other media to look at the language features; authorial bias, intent, and purpose; as well as the way the text, video, or media might perpetuate grand cultural narratives. Also involves working to deconstruct these grand cultural narratives.

Dialogic

 Exploring literacy as a social practice by exploring multiple perspectives and meanings of a text or media. In particular, this exploration may occur through dialogue and questioning.

Empowering

 Examining issues of power in text, media, classroom, school, and/or society in order to counter deficit mindsets and empower students.

Transformative

 Considering how texts, media, and/or society can be transformed to be more equitable and creating opportunities for social action.

Intersectional

 Involves intersecting the six previous themes, as well as considering how systems of oppression, such as race, class, and gender, interact in texts, media, the classroom, and/or society.

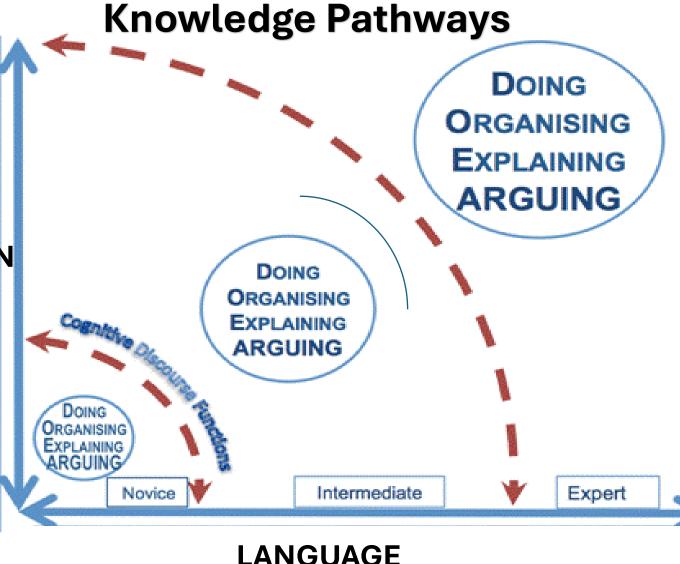
Mapping Pluriliteracies Development

(subject)
KNOWLEDGE
CONSTRUCTION

Macro-genres DOEA

Task Design

(Polias, 2016)



LANGUAGE PROGRESSION L2 AND L1

Languaging learning is crucial

To language is a verb



Language is not about words... words are meaningless

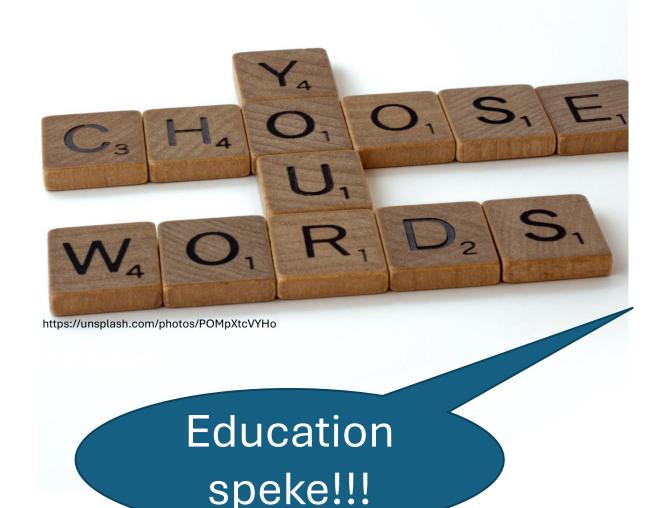
(out of context)

Consider

Languaging & translanguaging



The problem with words as semiotic tools



- Sustainability
- Globalisation
- Bilingualism/multilingualism
- Equity/equality
- Literacies & Pluriliteracies
- Ecologies
- Communities of Practice
- Policies
- Pedagogies
- 21st century skills
- Decolonisation



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.

Β.



Draw this concept..

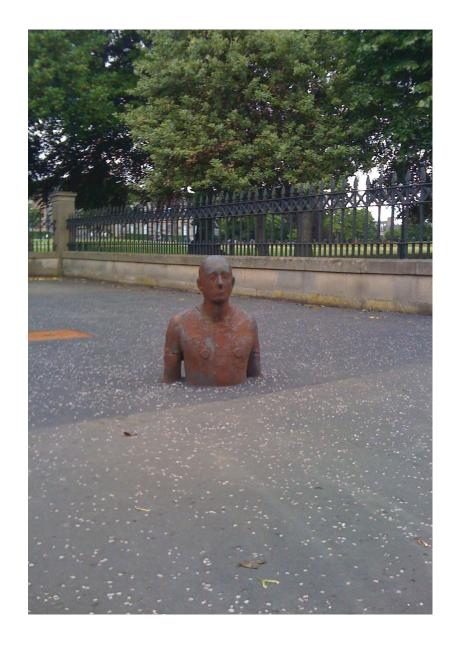
The Principle of Archimedes

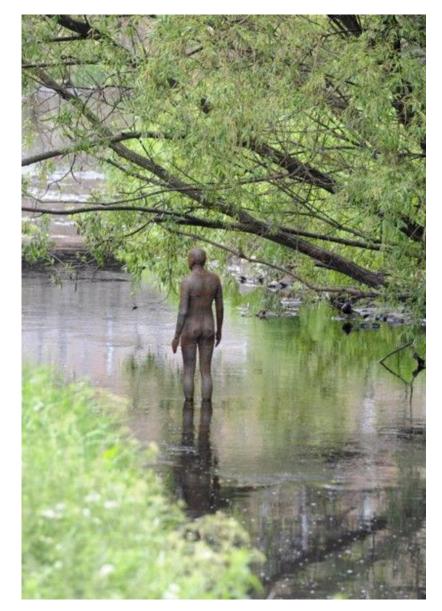
The value of thrust force is given by the Archimedes law which Archimedes of Syracuse of Greece discovered.

Archimedes' principle states that:

"The upward buoyant force that is exerted on a body immersed in a fluid, whether partially or fully submerged, is equal to the weight of the fluid that the body displaces and acts in the upward direction at the center of mass of the displaced fluid".

In other words, when an object is partially or fully immersed in a liquid, the apparent loss of weight is equal to the weight of the liquid displaced by it. So, therefore, Archimedes' principle tells us that the weight loss is equal to the weight of liquid the object displaces.





Why our students need these skills

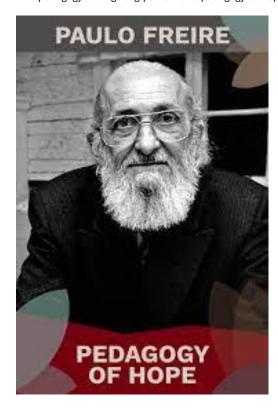
https://www.pedagogy4change.org/paulo-freire-pedagogy-of-hope/

'Critical literacy offers an important strategic, practical alternative for teachers and students to reconnect literacy with everyday life, and with an education that entails debate, argument, and action over social, cultural and economic issues that matter' (Luke and Woods 2009).

In other words, critical literacy equips learners with a sophisticated awareness of the political realities of learning. And, more importantly, **nurtures both the skills to successfully navigate such ideological and economic debates about the future and contribute to their "solutioning**".

https://sofhumanity.com/for-educators/the-human-literacies-framework/

Social media, AI, digital explosions in 2025



Written in 1970s yet very relevant



https://unsplash.com/photos/black-white-and-orange-bird-on-brown-wooden-fence-during-daytime-VsloozCvARk

So, what now???

How do we transform all this blah blah into practice?

PLURILiteracies are holistic

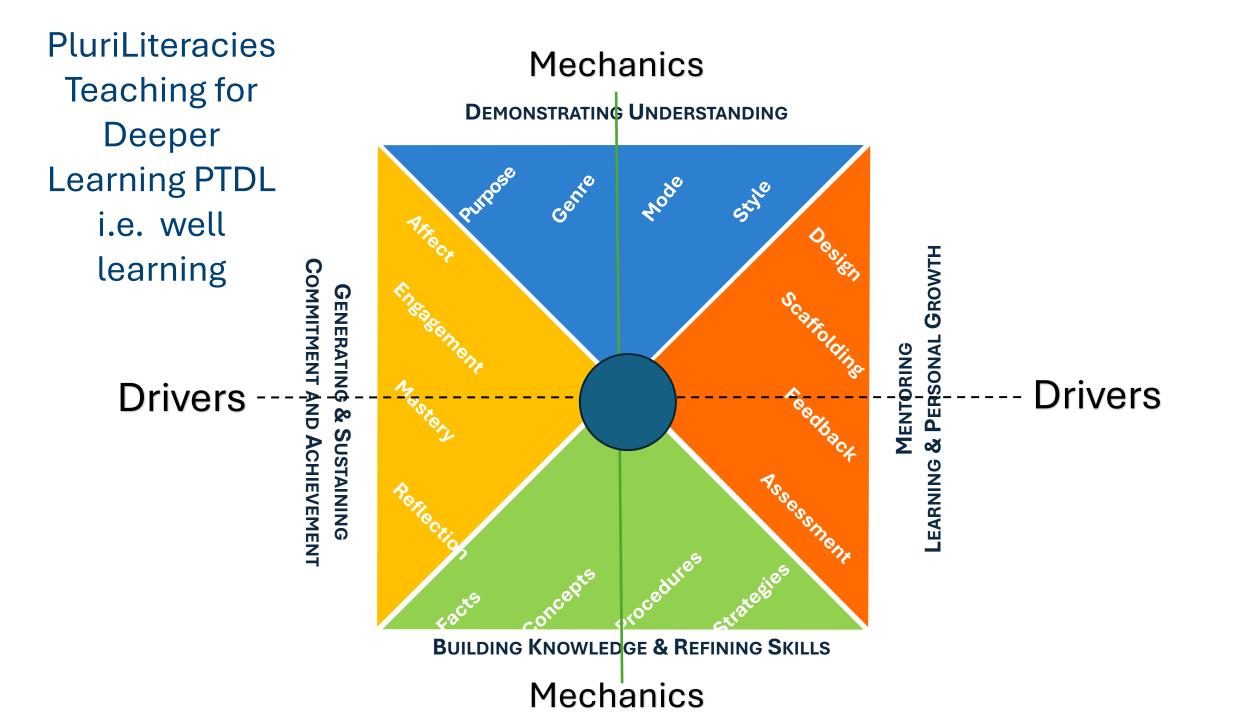
- cut across languages apply to all languages including the first language;
- 2. focus within and cut across subject disciplines and promote transdisciplinarity;
- 3. integrate with other literacies (e.g., digital, media, critical, visual, data, spatial, emotional)
- 4. Ecological dynamic/growth AND......



Deeper Learning

Deeper learning occurs when knowledges and understanding are internalised and automatised in ways which enable individuals to demonstrate their learning of different knowledges in appropriate discipline/thematic specific ways and transfer their learning to other contexts, using more than one language

Coyle & Meyer 2020



Multimodality means seeing language as text hecause language is text

Linguistic fluency is no longer enough in 2025

Лингвистичната плавност вече не е достатъчна през 2025 г.

Textual Fluency involves:

- Learning how to achieve textual understanding
- Increasing content relevance
- Developing critical cultural consciousness
- Growing learner agency

Textual fluency is the ability to de-re-coconstruct successfully and critically navigate a wide variety of texts using a wide variety of modes. It also is where learners create texts that they own. Text is everything;
text is our content;
text is our motivator;
text is multimodal;
text is about who we are,
where we are
where we want to be.

Multimodality

No text – whatever mode- is neutral

Epistemic fluency

The nature of knowledgewhat it mean to 'know' in this field? Beliefs about the nature of knowledge; what counts as knowledge? How do we know we know?

Goldman et al. Alan de Cruz



Epistemic fluency

Epistemic fluency is the ability to understand, switch between and combine different kinds of knowledge and different ways of knowing about the world. It offers an alternative to conventional understandings of cognition and learning, and an array of strategies that may also be relevant to the way we teach ...

Working on real-world problems usually requires the combination of different kinds of specialised and context-dependent knowledge, as well as different ways of knowing.

It's a deep understanding of how knowledge works. Learners need to understand different disciplinary literacies – the way in which different knowledges are created and communicated.

(Markausite & Goodyear, 2016, p20)

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https://epistemicfluency.com/kudos-karma/

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Designing tasks and materials is a <u>philosophical</u> endeavour

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Only then does designing tasks and materials become a **pedagogic** endeavour

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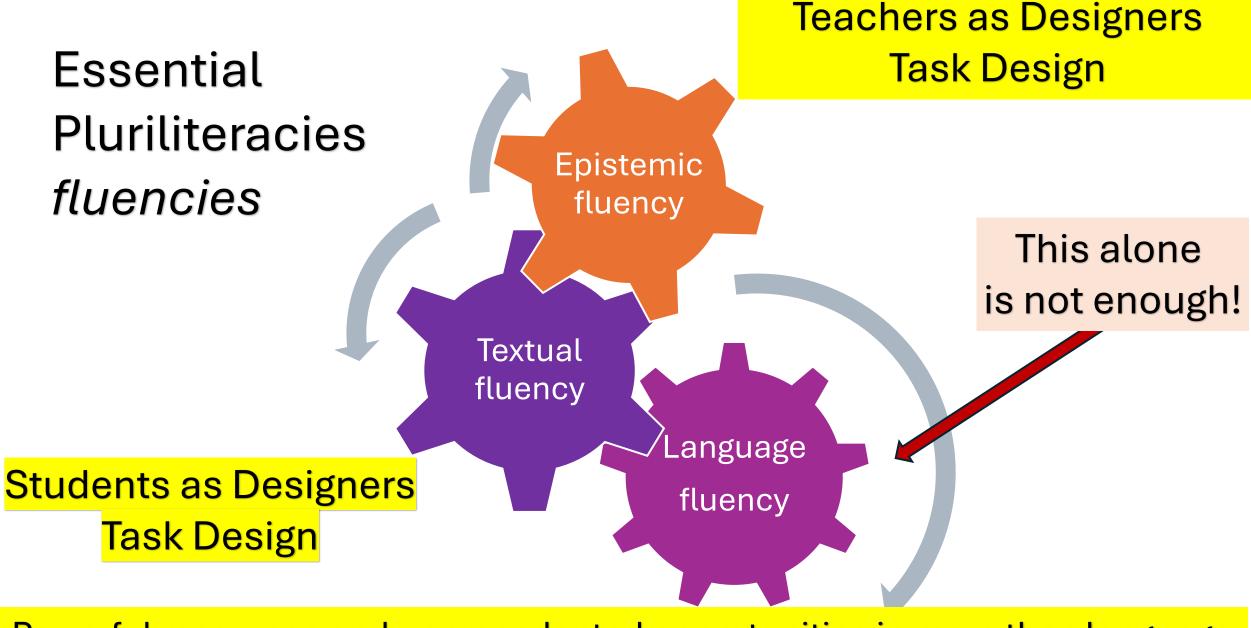
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He shakes his head, smile



Powerful resources and unprecedented opportunities in more than language

Designing Plurilingual Learning is the core

The way we design learning must change

Understanding the four Major Activity Domains (applies to *all* areas of the Curriculum)

- **Doing** (procedure)
- Organising information (descriptive taxonomic)
- **Explaining** (sequential, causal, theoretical, factorial, consequential explanation & exploration)
- Arguing (challenging, exposition and discussion)

(Veel 1997) (Polias 2006)

[Like a historian, mathematician, scientist, language expert – according to subject literacies, thematic strands, rules and academic discourse across all stages of education]

KNOWLEDGE AND ACTIVITY DOMAINS IN SCHOOL SCIENCE	SPECIFIC GENRES	PURPOSES
Doing science	1 Procedure 2 Practical report	 instructs someone in how to make or do things 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	 decribes features of places or physical phenomena decribes different kinds of physical features
Explaining events scientifically	Explanations 1 sequential 2 causal 3 factorial 4 consequential 5 theoretical	 explains a physical phenomenon by presenting the events producing the phenomenon in chronological order explains the sequence of an event or phenomenon with reasons included explains the multiple factors that contribute to a particular event or phenomenon explains the effects or consequences of a particular event or phenomenon a theoretical explanation illustrates a theoretical principle
Arguing aspects of science	Expository genres 1 argument - analytical	analytical arguments present on an issue in order to per- suade the reader/listener to agree with a particular point

Taking students along their knowledge pathways by designing opportunities for everyone to be engaged in tasks-Doing, Organising, Explaining, Arguing

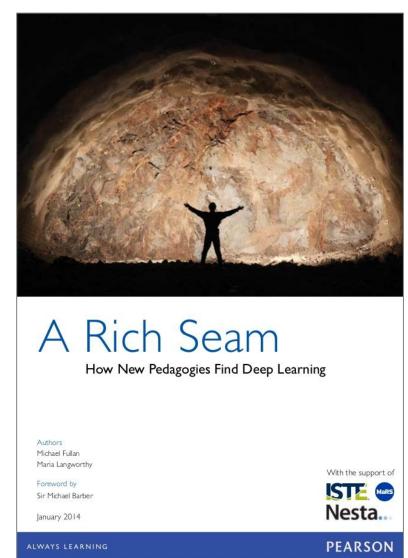
Cognitive Discourse Functions

Cognitive Discourse Functions for critical deeper thinking

- Classify
- Define
- Describe
- Evaluate
- Explain
- Explore
- Report

(C. Dalton-Puffer, 2011)

Learners and Teachers as co-designers of learning

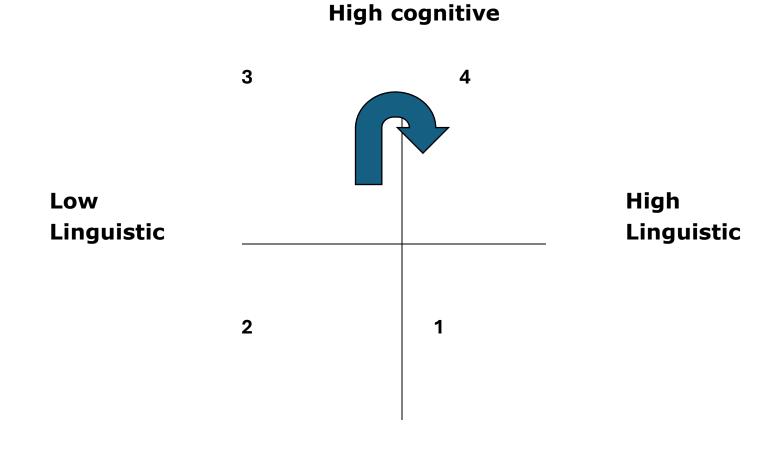


Cognitive Discourse Functions (CDFs)

- 1. Classify I tell you how we can cut up the world according to certain ideas. Classify, compare, contrast, match, structure, categorise, subsume
- **2. Define** I tell you about the extension of this object of specialist knowledge. Define, identify, characterise
- **3. Describe** I tell you details of what can be seen (including metaphorically). Describe, label, identify, name, specify
- **4. Evaluate** I tell you what my position is vis a vis X. Evaluate, judge, argue, justify, take a stance, critique, recommend, comment, reflect, appreciate
- **5. Explain** I give you a reason for and tell you the cause of X. Explain, reason, express cause/ effect, draw conclusions, deduce
- **6. Explore** I tell you something that is potential. Explore, hypothesise, speculate, predict, guess, estimate, simulate, take other perspectives
- 7. Report I tell you about something external to our immediate context on which I have a legitimate knowledge claim

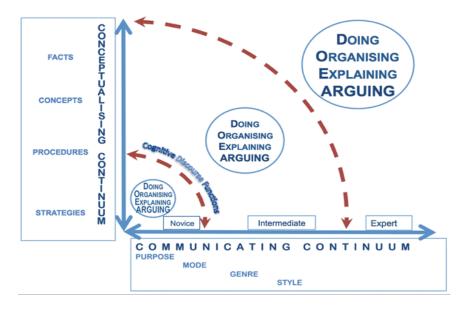
Dalton-Puffer 2013

Using a matrix for tasks audit

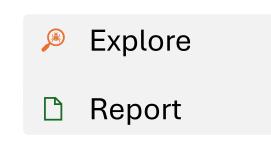


Low cognitive

Mapping Pluriliteracies Development

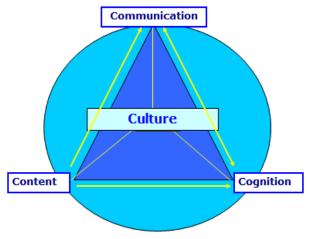


- Classify
- Define
- Describe
- Evaluate
- Explain





An Integrated Approach for Learning and Using Languages Across the Curriculum



Language for learning Language through learning

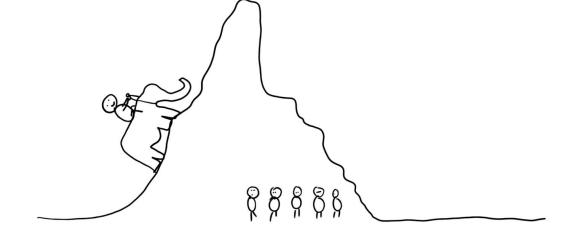
Foreign Language Learning and Using

Language of learning

Scaffolding tools

I'VE LEARNED THE MOST, UNLEARNING

WHAT I KNEW.



The power of unlearning

SoniaGartside.com



'Harrapaketa'



Well-being is about 'well-learning'*

- Motivating learning through classroom dialogue
- Designing learning events
- Task-design enabling all learners to feel valued, achieve
- Making student experience relevant, alongside an active understanding of identities, cultures and deeper learning
- Repositioning second or other language learning as an enabler for developing textual fluency (essential for 2025) and epistemic fluency (understanding and critically thinking about self and others as knowledge is constantly being constructed)

Well learning brings together wellbeing literacies & pluriliteracies for deeper learning

Well-learning environments help students to take ownership of their learning, understand the fluidity yet interconnected nature of external and internal factors that shape learning spaces impacting their sense of wellbeing through personal and academic growth.

These are dynamic spaces developing self-worth and agency by:

- Building shared understanding
- Promoting students as designers of learning
- Encouraging lived experiences
- Recognising constants changes
- Fostering self actualisation
- Reflecting on what is working and what is not

What works.....is what you want

- Translating theories into professional discourse into dialogic multilingual spaces
- Design, design, design
- Constant reflection dealing with uncertainty
- Well-learning as an holistic pedagogic concept
- Actioning strategies for ecological well-teaching and well-learning
- Dealing with mess
- Professional action, time, reflection
- Harrapaketa, ownership
- Building real communities, with real teachers who teach real students
- Just doing and not giving up asking wicked questions-

Provocations

- 'Best' practice isn't what we do but who we are
- Flourishing and wellbeing require ecological learning design and planning
- Deeper learning is complex CLIL spaces provide opportunities
- Linguistic progression is no longer enough in any (CLIL) classroom
- Pluriliteracies theories can be transformed into multilingual classroom practices for very diverse learners
- Teachers and students need to own their learning embracing adaptation to repertoires and identifying urgent changes needed

Alice: This is impossible.
The Mad Hatter: Only if you believe it is.





Sincere thank yous to you all

Do.coyle@ed.ac.uk



Discussion



https://unsplash.com/photos/white-flowers-in-clear-glass-vase-YiF5f2KaO_Y