





I acknowledge the Traditional Custodians of the land on which we live, work, learn and play. I recognise their continuing connection to land, water and community.

I pay respect to Elders past, present and emerging.

Where are we headed...

What does it mean for curriculum leaders to understand curriculum renewal and implementation through the lens of social brain theory?

Curriculum collaboration is important work, but why can it be underestimated in its social and cognitive complexity?

So, what, now what?

Practical approaches and strategies to support leading curriculum with the social brain in mind.



Dianne (Classroom Teacher)

"You have to **switch** your brain from interacting with these **students in front of you** to then deliberating over an **email for a parent** or your **head of department**, while you are heading off to the next meeting. Then you **quickly switch** again for the meeting to discuss strategies or assessment tasks with your **teaching team**."

Silos to Collaboration



Insular Behaviours

Collective Wisdom

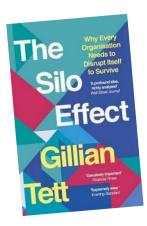
Collaboration can take many forms, and in some instances the term itself can be used *interchangeably* with cooperation, collegiality and working alongside peers.

The definition being used here refers to a *process in which* people are working together with an emphasis on common goals, relationships, and reciprocal interdependence as a way of improving schools, teacher quality and student achievement (Department of Education and Training,

2018; DuFour & Reeves, 2016; Musanti & Pence, 2010; Sharratt, 2019).







Dunbar's Number

Social Brain theory (Dunbar, 1998)

proposes that we can maintain up to **150 relationships** at any given time.



Individuals do not give equal weight to each relationship (Mac Carron, 2016)

Energy, attention and effort are given to those closest (Mac Carron, 2016)

Determination based on frequency of contact and recognition of a mutual and reciprocal relationship that has trust at its centre (Dunbar, 2018).



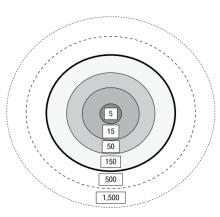


Fig. 2. Human personal social networks are structured into a series of hierarchically inclusive circles based on emotional closeness and frequency of contact. The 150 circle, indicated by the bold line, defines the limit on the number of bilateral relationships of obligation and reciprocity. Outside of this lie at least two further circles: The circle of 500 adds in everyone whom we would count as acquaintances, and the outermost layer of 1,500 includes everyone whose face we can put a name to

Social Complexity

Number

Collaborative interactions across a week

Differentiated

Working with multiple individuals in multiple roles.

Social complexity highlights the cognitive demands associated with maintaining these differentiated relationships but has not yet been considered with increases in the intensity of teachers' and leaders' work today (Beck, 2017).

Content

Knowledge of each component – pedagogy, curriculum, assessment, behaviour...

Cognitive Demand

Higher order intentionality influences distribution of effort, energy and attention.

F-10 Curriculum Senior secondary curriculum Student diversity Resources Downloads Help and sup

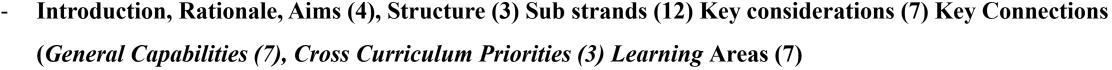
Version 9.0

The Australian Curriculum

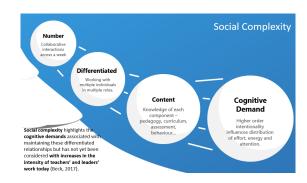
... setting the expectations for what all young Australians should be taught, regardless of their background or where they live.

Australian Curriculum

Understand this learning area (English)



- Year level Description
- Achievement standard
- Content Descriptions
- Elaborations



Australian Professional Standards for Teachers

Domains (3)

Professional Knowledge (2), Professional Practice (3),

Professional Engagement (2)

Career stages (4)

Focus Areas within each domain (19) (PK – 6, PP- 6, PE – 7)

Australian Institute for Teaching and School Leadership

Australian Professional Standards for Teachers

All career stages

Export the Standards

Potentially: 3x7x19 = 399 components



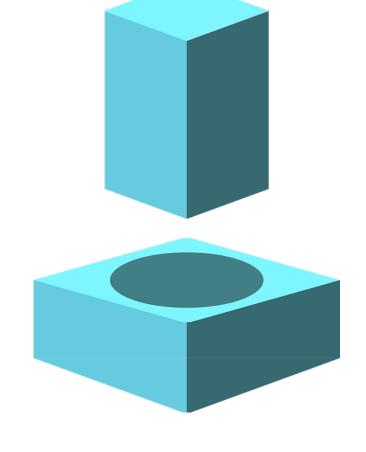


"Yeah, time and exhaustion. You have the two big ones, so you get to the end of the day and then you are expected to engage in a collaborative meeting..."

Collaboration is important work but can be derailed!

Student improvement requires the types of collaboration that are **socially and cognitively complex**.

How might we reimagine these work environments?



"You've got the **whole day** running through your head, you're trying to deal with this kid who's done that, and that kid and their assignment coming in, at the same time as **making a mental switch** to this new project with this **energy** and whatever and listening to other people."

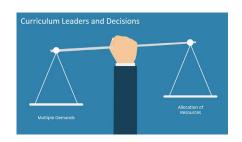
(Ramona – Head of Department)

Strategy 1. Curriculum Leadership requires **additional and different** types of knowledge, training, and professional experience





Rise, and shine.



Strategy 2. Recognise this issue and address consequences arising from the **cognitive and social** complexity of collaboration in your context.



Context is important - list all the topics that individuals and teams collaborate on within and across your school.

This includes other improvement agendas.

Use the information collected to map the **number of topics** teams are collaborating on with **real** time allocations.





Time allocation - time pressures are mostly responsible for triggering cognitive fatigue. Identify when, and for how long teams collaborate and evaluate the reasonableness of expected outcomes in the time available.

More time is not available the number of topics and the time allocated can be adjusted.

usc.edu.au University of the sunshine coast, queensland, australia | cricos provider number: 01595D Rise, and shine.

Strategy 3. Leading Curriculum Renewal

• Data (Observations, Conversations and Artefacts) shape the amount of instructional time we afford to specific

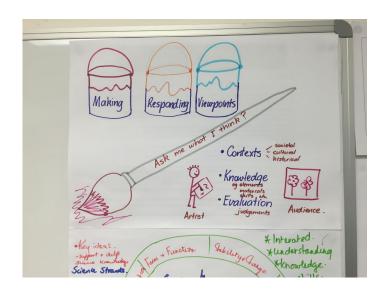
content/knowledge.

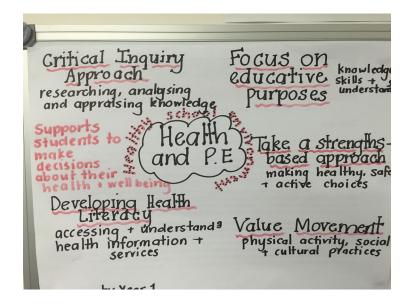


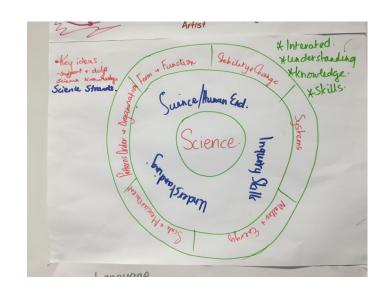
Triangulating (Curriculum Intent, School Context, Student Data) shapes the content we focus on for the amount of time we have available.

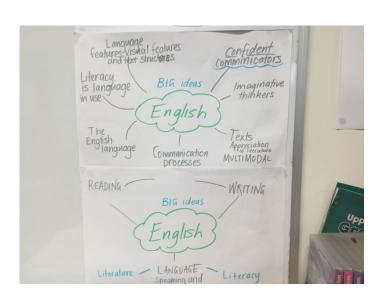
 We usually teach MORE than what we should at the risk of depth and complexity.

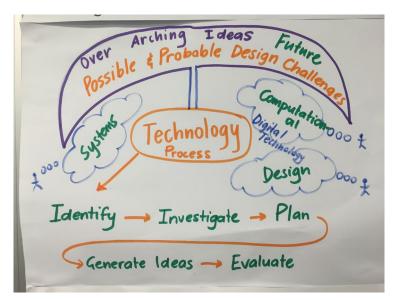
Create opportunities for identifying the big ideas of a key learning area

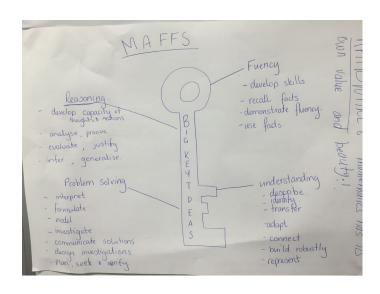




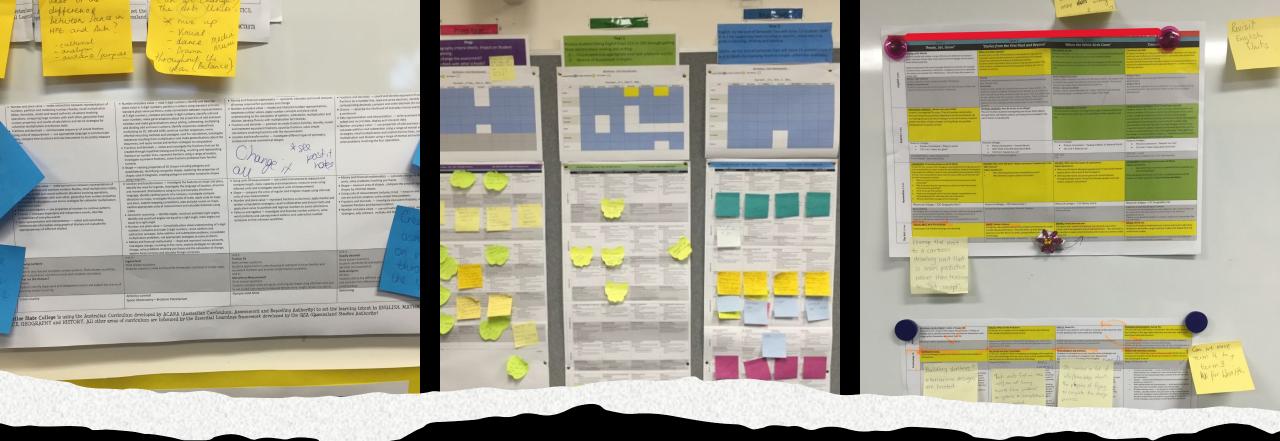






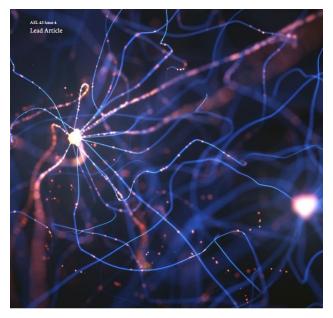


and revisit annually...



Leave Tracks of Teacher Thinking Visible

Publications



Leading with the Social Brain In Mind

University of the Sunshine Coast, Australia; Dr Susan Simon, Senior Lecturer, School of Education and Tertiary Access,

Dr Wayne Graham, Head of Campus, USC Caboolture, Senior Lecturer, Management,

AEL – Vol 43 Issue 4 2021 – Lead 2







Queensland Teacher's Journal March 2023



Amba Press (July 2023)

Dr Joanne Casey

Cognition, complexity

in schools



