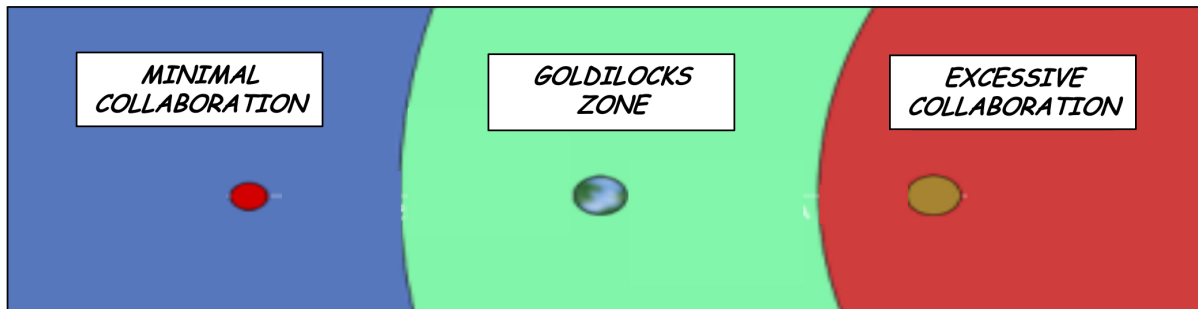# Collaborating In The 'Goldilocks Zone'

Goldilocks Zone (Astrobiology) = Area of Optimal Habitat

School Improvement & Effective Collaboration

After working with hundreds of schools across multiple systems in multiple countries, *'Inconsistencies in school-wide pedagogy and practice'* is one of the most frequently identified (and important) school improvement issues I have come across. *'Improving Collaboration'* (i.e., working together better to optimise outcomes) is typically one of the corresponding school improvement recommendations arising from such problems, which makes a lot of sense too. After all, if you're the external advisor appointed to complete a review of the school and you've done multiple interviews where staff are 'not sure of things', 'don't remember things', or provide a 'contrarian view' to the school leaders perspective, you are on safe ground to identify 'collaboration' as one of the key issues.

'Improving' Collaboration: Too Little or Too Much?

BUT (there's always a but)… here's the catch, for many school leaders once they receive their reports and are trying to work out what to do next: 'improving' collaboration does not necessarily equal 'increasing' collaboration – and somewhat paradoxically, in many cases the antidote needed is to actually 'decrease' collaboration (I know this may sound bizarre and heretical to some people so please here me out). You see, the problem of staff 'not being sure of things', 'not remembering things', or 'having a contrarian view' can be caused by BOTH a lack of collaboration or excessive collaboration - also known as collaboration overload.

When the problem is caused by a 'lack' of collaboration where staff feel uncertain and isolated (a.k.a. 'mushroom syndrome', or being kept in the dark) the solution is to increase the flow of communication by raising the amount of information shared and the volume of relationship connections. But when the problem is caused by 'excessive' collaboration (where staff feel exhausted and detached - overwhelmed

by too much communication and too many relationships to manage) the solution needed is in the opposite direction, to reduce the amount of communication and volume of relationships to manage. For many school leaders the strategy of reducing the amount of communication and relationships among staff to improve collaboration seems counterintuitive. Let's unpack the evidence for why this may well be what's needed for some schools trying to tackle the tricky problem of 'improving collaboration'.

Factors	MINIMAL Collaboration	HEALTHY Collaboration	EXCESSIVE Collaboration
Communication (Brooks' Law)	Mushroom Syndrome	Informed & Up To Date	Overwhelmed & Confused
Relationships (Dunbar's Number)	Uncertain & Isolated	Connected & Content	Detached & Disconnected
Wellbeing (Symptom Profile)	Low Mood & Anxiety	Calm & Focused	Frustrated & Exhausted
Hazard Profile (High/ Low Risk)	⚠️	✅	⚠️

Optimising School Wide Collaboration: 'The Goldilocks Zone'

One of the most important things needed for human beings to flourish is to be able to live and work in optimal environments. In the story of Goldilocks and The Three Bears this narrative was focused on finding the right chair, bed and food to eat – for if Goldilocks had a great chair she could sit without any poor posture or discomfort, a great bed would provide a restful night's sleep and great food would create the nutrition needed to have the energy to be her very best self! Importantly, the fairy-tale reminds us it is possible to have extremes on both sides of the optimal state (i.e., too hot or too cold, too hard or too soft etc.) and this is so important when it comes to considering the issue of school-wide collaboration – but let's not rely on fairy-tales alone, let's look at the science of astrobiology too.

Astrobiology, which is the study of life forms across the universe, was made famous in the 2015 Matt Damon movie 'The Martian' where the lead character is stranded on the planet Mars and must recreate the optimal habitat for growing plants and generating food so he can survive. Astrobiologists know that the optimal living conditions for humans (AKA 'The Goldilocks Zone') occurs when the right amounts of various elements are present (as opposed to too much or too little).

So, whether it's a fairy-tales or science that we draw inspiration from (or even William Shakespeare who said 'too much of a good thing can be bad') we can clearly see the answer to 'improving collaboration' in schools is about creating a healthy, 'Goldilocks' zone for collaboration.

Optimising Collaboration: Dunbar's Number & Brooks Law

Both minimal and excessive collaboration have negative impacts on wellbeing and create significant risks to school performance (see Table above). The two factors which ultimately dictate the extent to which collaboration is minimal, excessive or in the healthy 'Goldilocks Zone' are 'relationships and 'communication' with the corresponding theoretical principles of Dunbar's Number of relationships and Brooks Law of communication providing some approximation for parameters for school leaders to consider. So, let's unpack the practical leadership knowledge each of these two theories can provide and share some actionable tools and tips on how school leaders can improve their approach to school wide collaboration so they achieve the optimal 'Goldilocks Zone' state where staff and students can flourish!

Dunbar's Number of Key Relationships

'Dunbar's number' refers to the notion that there exists a cognitive limit on the number of relationships a person can manage. The number of 150 was first proposed in the 1990s by British anthropologist Robin Dunbar to explain the maximum number of social relationships (both work and personal) human beings can keep track of – see diagram below. Like any theory of this type, there is the usual pile on of statisticians and theorists questioning it's validity contrasted by a large number of practical business people, school leaders, HR managers and others who all agree that human beings have a finite capacity when it comes to the maximum number of relationships they can attend to at any given time and the number of 150 consistently appears as a practical guide from their own lived experiences.
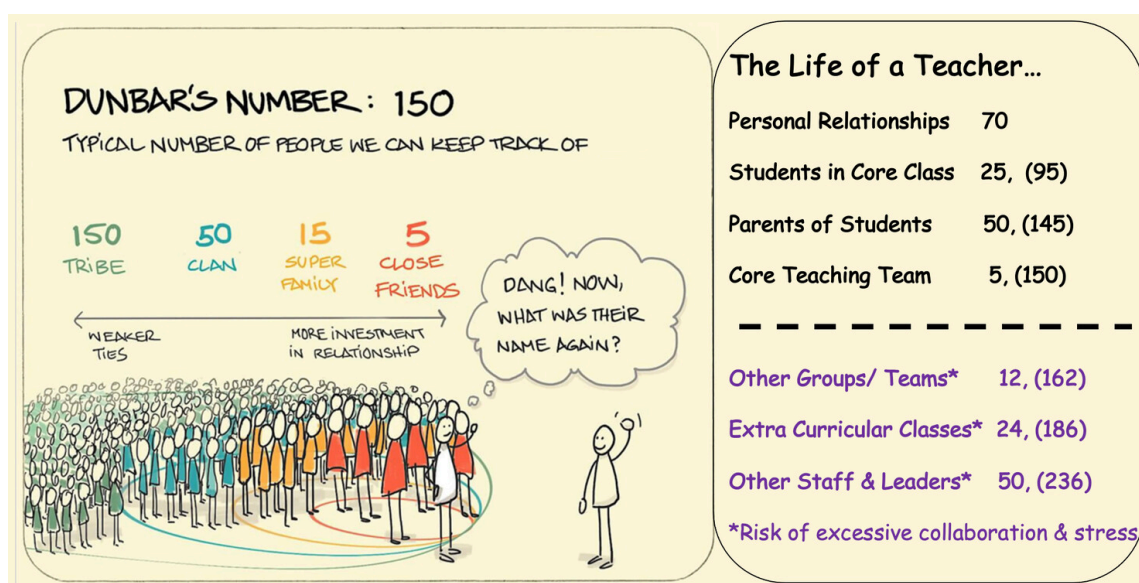
We would suggest that for school leaders the usefulness of Dunbar's number has two key purposes: (1) recognising the number '5' for the inner circle and therefore the need for teachers to be in High Performance Teams of approximately 5

members where they can deepen their working relationships and feedback processes (and avoid where possible the practice of annually rotating team members into other teams); and (2) recognising the number of 150, deducting 70 for personal relationships and expecting no more than 80 work related relationships to be able to be attended to with any depth or rigour at any given time. Taking the time to actually map out the '80' yields a lot of insights into the 'reasonableness' or otherwise of expectations placed upon teachers.

School Wide Collaboration Map
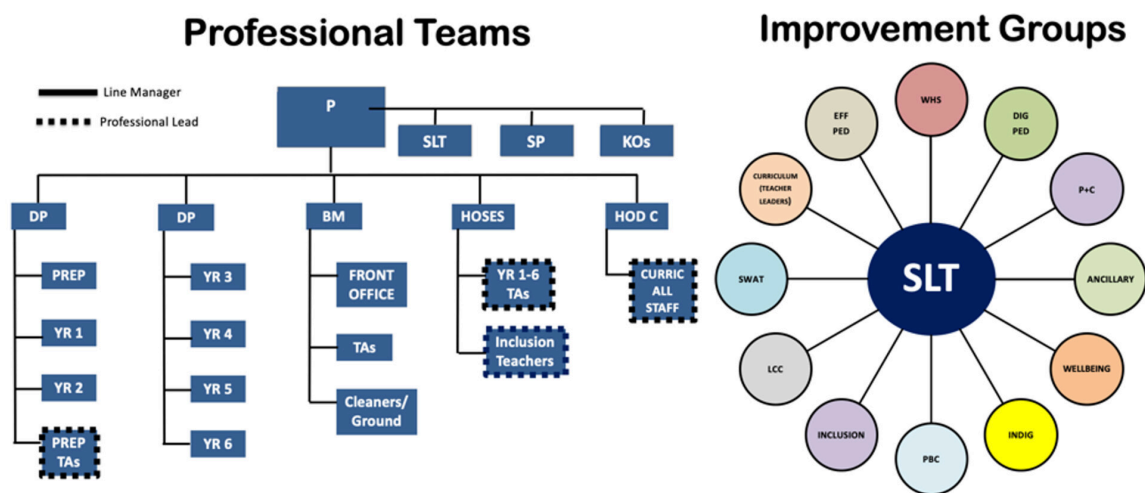
At an organisational level completing a 'school-wide collaboration map' (see example) identifying the groups and teams' staff are expected to belong to and invest in is also a very useful strategy to optimise this aspect of collaboration.

School-Wide Collaboration Maps: Practical Tools and Tips

The process of backward mapping all the teams and groups within your school and cross checking the extent to which staff are expected to manage a number of relationships that may exceed Dunbar's Number is a powerful way to build a high capacity culture in your school. If school leadership teams get 'stuck' while undertaking this work, we typically find this is caused by potential role confusion within the leadership team itself and thus we need to take 'one step back before we can take two steps forwards'…

1. Leadership Team Charts & Role Clarity: The GSTs

One of the most frequently occurring obstacles to building an effective school wide collaboration map is due role confusion within the leadership team itself. Sometime there is confusion within the leadership team about who is the line manager of various professional 'teams'; who is the chair of the various improvement 'groups' (aka committees) and who the overall responsible person to oversee the implementation of

key 'strategies'. (Sometimes there are also multiple 'managers' of the same staff or multiple people being given the overall responsibility for various strategies causing untold confusion and frustration across thew wider school).

This problem occurs despite the fact that most School Leadership Teams typically have detailed role descriptions for each team member as well as a basic team chart showing the reporting lines for team members (see diagram '1' below). If you encounter this problem then the action step is to clarify the individual responsibilities of each member of the school leadership team for different Groups, Strategies and Teams so there is a clear and accountable person for each area (see diagram '2' below). Another 'tricky' bit that may occur at this point is where leadership team members may be confused about the underlying definitions of what constitutes a 'Team' or a 'Group'. The table below should assist if your encounter this problem:

Teaching Team (Cohort Group)	Improvement Groups (Mixed Group)
Data Accountability At Group Level	Data Accountability Not At Group Level
Working on same curriculum level	Working on different curriculum levels
Working with same age / development group	Working with different age / development groups
Working on similar classroom and behaviour dynamics	Working on different classroom and behaviour dynamics
Working with peers with higher day-to-day contact	Working with peers with lower day-to-day contact

With clear accountabilities established for each member of the school leadership team across applicable 'Groups', 'Strategies' and 'Teams' (noting this will look quite different across different members of the leadership team according to their core role and duties) the last step to drawing the school wide collaboration map is quite straight forward.

All the 'Groups' are drawn up as circles in a hub and spoke model reporting back into the school leadership team and all the 'Teams' are drawn as rectangles in a traditional line management organisation chart (see diagram '3' below). Once the leadership team has then made any final adjustments to the structure to minimise the risks of 'relationship overload' for staff, the School-wide Collaboration Map is then published and distributed to all staff triggering more effective collaboration across the school.
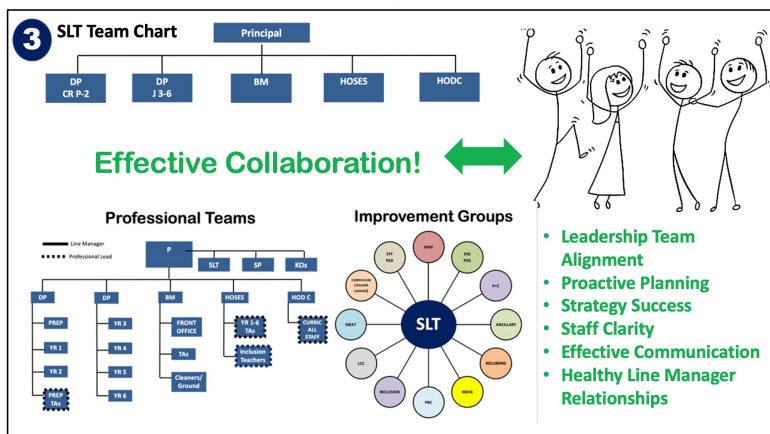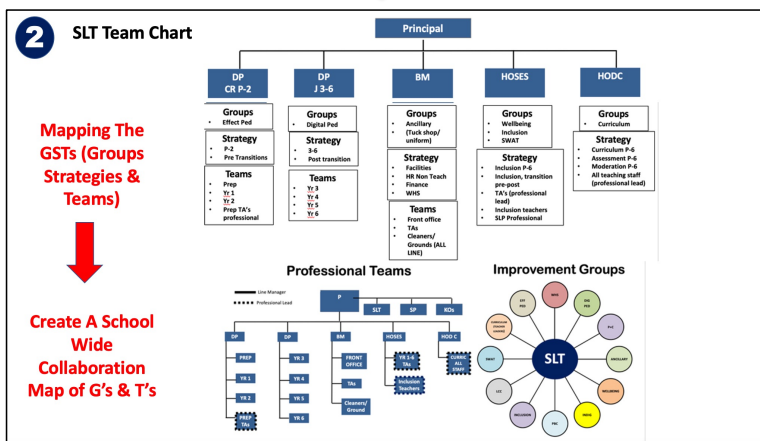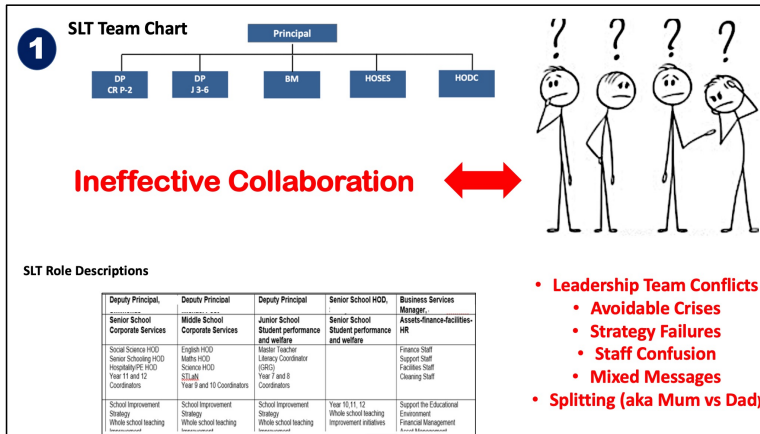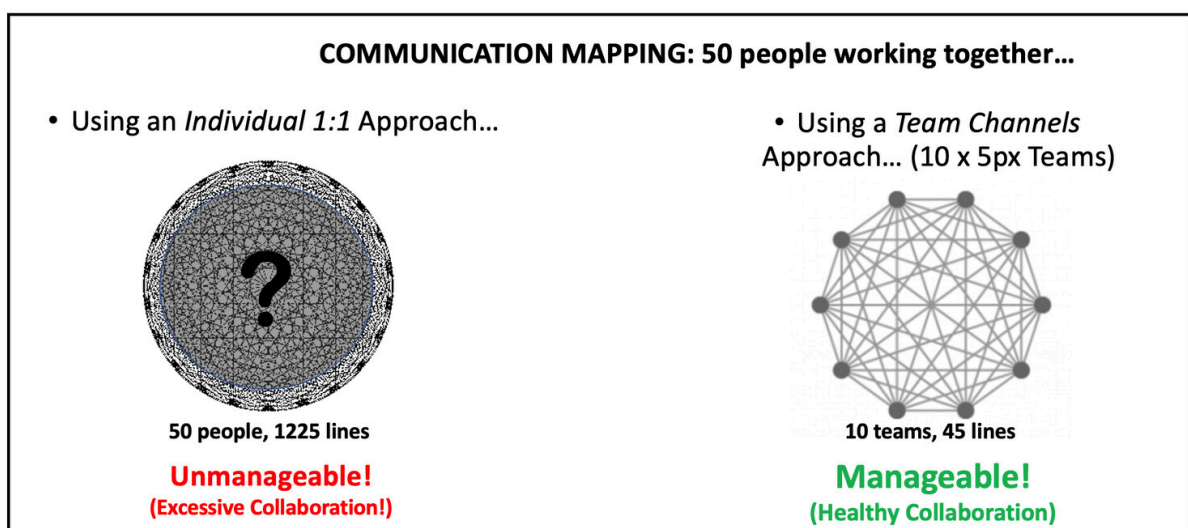
Brooks' Law of Communication

Brooks' Law states that '*as groups get larger, timelines get longer and the risk of errors increases*' and was originally applied to communication risks in project teams. The idea being that the more people that are involved in working on a collaborative task, the more lines of communication must be satisfied to keep

everyone up-to-date with each other to optimise their teamwork. The usefulness of this idea for school leaders is around 'mapping communication channels' (individual vs team channels) and taking an honest look at how information actually flows around the school and improving the efficiency and effectiveness of school-wide communication using team channels. Many schools have staff updates and newsletters, but they may be ignored by many staff and/or their content and distribution strategy is poorly executed so the reality is more of a 1:1 individual approach which, as you can see in the diagram below, creates an enormous volume of communication with corresponding risks of gaps, misinformation, and errors.

BROOKS' LAW of Communication

'As groups get larger, timelines get longer, and the risk of errors increases.'

COMMUNICATION MAPPING: 50 people working together...

- Using an *Individual 1:1* Approach...

50 people, 1225 lines

Unmanageable!
(Excessive Collaboration!)

- Using a *Team Channels* Approach... (10 x 5px Teams)

10 teams, 45 lines

Manageable!
(Healthy Collaboration)

The use of frequent and effective 'team channels' of communication massively reduces the risk of communication confusion and/or overload. You can download a quick audit tool to map your school's communication cycle HERE. We've also provided an example of an optimised school wide communication cycle which is also referred to as 'The Golden Thread' in the diagram below.

The Golden Thread
Whole School Meeting & Communication Cycle
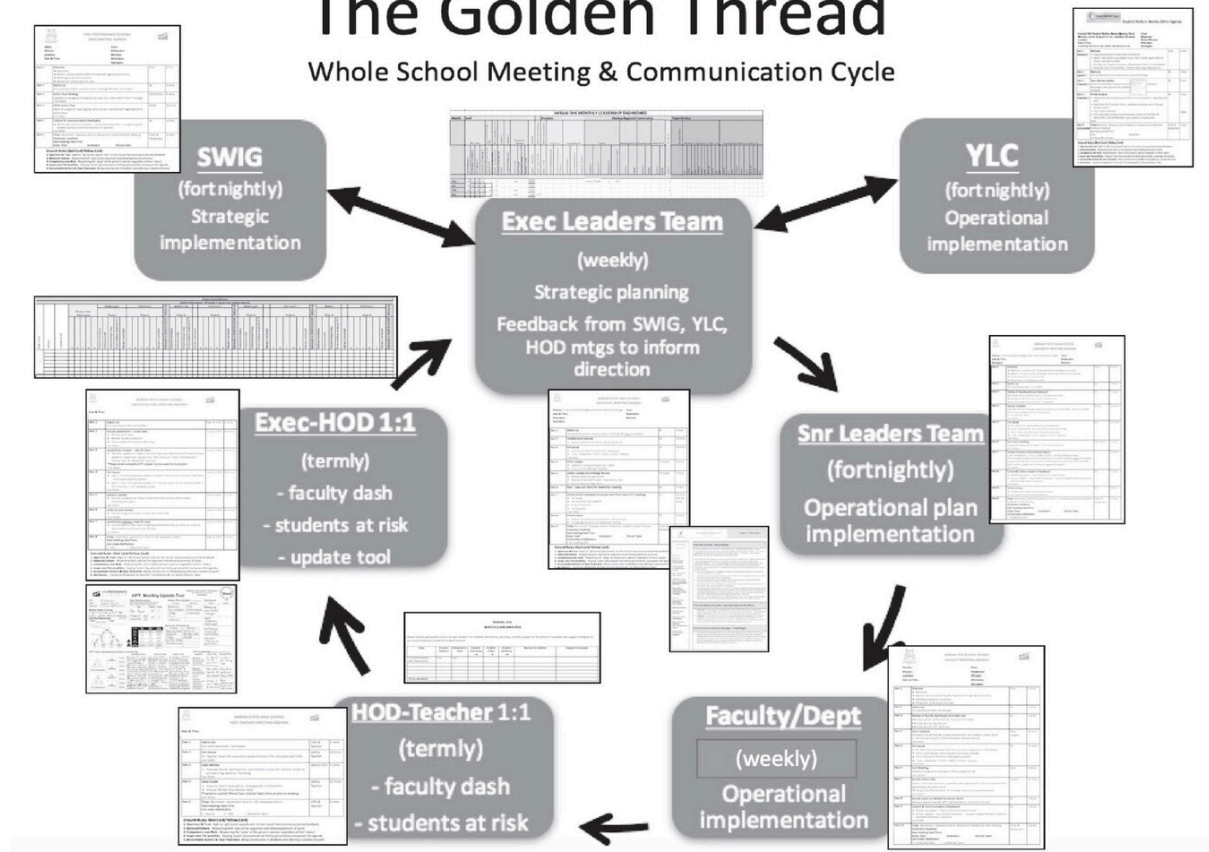
To ensure your school is in the healthy zone or 'Goldilocks Zone' of communication in this regard there are two things to consider (1.) optimising your School-Wide Meeting and Communication Cycle and (2.) implementing team specific and school-wide data dashboards which enable data conversations looking at the interaction effects between student performance, wellbeing, behaviour and attendance, and the fluctuating collective efficacy levels of their corresponding teams of teachers.

1. Optimising School-Wide Meeting & Communication Cycles: Practical Tools and Tips

Regarding the process of optimising your School-Wide Meeting and Communication Cycle, this is about both the frequency and effectiveness of newsletters and staff updates as well as the effectiveness of team meeting agendas to enable both reactive and strategic issues to be addressed. An effective school-wide meeting and communication cycle is also referred to as 'The Golden Thread' because there is alignment or 'line of sight' between organisational objectives and the leadership and team meeting and communication structures which maximises performance.

When we focus in on team meetings, there are several important roles needed such as 'chairs', 'moderators' and 'live note takers' to manage time effectively, ensure active contribution from all team members ,and document actions and

accountabilities arising from meetings and share these within the team and with relevant stakeholders.

You can see the special recipe of an effective Team Meeting Agenda is the diagram below. The flow of meeting items creates inclusion and addresses 'hot issues' proactively enabling staff to be fully focused on more strategic items in the second half of the meeting. If you'd like to learn more about how to develop more effective meeting agendas and the meeting roles and protocols that massively boost team collaboration we expand on this in our '*Level Up: 5 Quickstarts for High Performance Teams*' which you can download from HPTschools.com.

When we focus in our team and school wide communication, there are some very powerful and effective newsletter and update templates that enable rapid sharing of information between teams and across the school. The use of quick newsletter updates shared across teams is important as staff may or may not read in full the 'live notes' (aka minutes) that may be shared across teams. And of course we can't revert to the trap of having to rely too much on lots of 1:1 communication as this compromises Brooks Law and ultimately lowers organisational performance
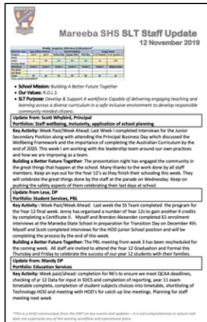
When Communication Channels Fail: Staff Not Reading Newsletters & Updates..

Despite having an appropriate frequency and useful content in their staff newsletter and update cycles many schools have problems due to staff simply not reading these updates. There are a 3 main reasons this happens which are worth noting such as:

1. The newsletter or update design not having clear headings and brief accessible information so it can be skim read for specific issues and deeply read for wider understanding;
2. Staff being overwhelmed and exhausted and as a result deprioritising reading updates in their work schedules; and
3. The insidious dark side of helpful 'rescuer' tendencies of leaders who follow up individually with staff to 'make sure they read the update' which paradoxically encourages staff not to read them (knowing that if it's really important someone will come and tell me personally).

Whilst all 3 of these issues have specific solutions, a great 'cover all' strategy is to include a 2-3min agenda item in every team meeting to review staff updates and newsletters that are relevant to the team and note any feedback to share more widely (see example below).

2. **Dashboard Datasets That Show Interaction Effects**.

Often data sets in schools exist in different systems and are reported in different formats and templates making data analysis both time consuming and complicated which increases the risk of faulty interpretations and conclusions. It is not uncommon for dashboards datasets to be either a.) too simplistic to be useful (ie., lacking any additional information beyond specific assessment results which does not allow analysis of interactions effects necessary to fine tune improvements in teaching and learning) or b.) so overloaded with any and all information available that they are too overwhelming to enable useful analysis and identification of nuanced improvement strategies.

To fix this problem we need to build the 'Goldilocks' version of data Dashboards which are neither too simplistic nor too overloaded but instead are 'just right'! A great data Dashboard provides teachers (and leaders) with datasets that show the interaction effects between a specific area of student performance and the related wellbeing, behaviour and attendance data, (as well as the impact of the collective efficacy levels of their corresponding teams of teachers). Having accessible and easy to understand comprehensive data sets increases the accuracy of interpretation and thus the usefulness in subsequent improvement strategies. An example of a 'Goldilocks' data dashboards which clearly shows the interaction effects of wider student and staff variables on academic outcomes is below.

When these 'Goldilocks' dashboards are implemented across the school, staff within specific teams can adjust teaching and learning strategies based on the underlying causative issues – accounting for the current state of 'capacity' as well as the 'capability' of their students (and their peer staff). Additionally, school leaders can look at the trends across the whole school differentiating support for staff across teams and learning needs across cohort creating a much more powerful and effective cycle of communication and support over the longer term.

Data Dashboards

Cohort Interaction Effects

Lead Indicators (CTE & SSE)

50:40:10 Lead Indicator Dashboard UPPER PRIMARY EXAMPLE	Prev. Yr School Average	Year 4 T1 Mid	T1 End	T2 Mid	T2 End	T3 Mid	T3 End	T4 Mid	T4 End	Year 5 T1 Mid	T1 End	T2 Mid	T2 End	T3 Mid	T3 End	T4 Mid	T4 End	Year 6 T1 Mid	T1 End	T2 Mid	T2 End	T3 Mid	T3 End	T4 Mid	T4 End
Improving Attendance — Attendance Rate %	92.6%	97.3	96.0	92.4	91.1	92.7	92.0	91.5	91.1	95.8	95.0	92.5	91.9	93.1	92.0	92.3	91.5	95	94.7	92.5	92.6	93.1	92.5	92.	92.1
% less than 85%	9.7%	4.3	4.6	4.8	5.3	5.4	5.9	5.8	5.6	4.4	4.9	3.5	3.8	3.1	2.6	2.9	3.2	.0	7.2	5.4	4.7	3.8	2.1	2.8	3.4
Lifting the Top — English A Standard %	19%	37	27	30	31	36	41	42	43	43	14	16	16	20	22	27	28	28	14	17	15	17	18	25	3
Maths A Standard %	27%	36	36	40	44	47	49	50	50	50	19	22	17	20	26	28	30	30	20	25	23	28	34	35	5
Reaching Standard — English C and above %	91%	90	87	88	85	85	82	85	85	85	86	87	87	88	87	88	87	87	88	90	91	93	94	94	94
Maths C and above %	94%	96	96	96	92	93	97	96	96	96	89	90	91	92	92			92	90	93	95	96	96	96	96
Safe and Disciplined Students — Average Daily Incidents (Minor)	4.5	0.30	0.51	0.45	0.45	0.38	0.49	0.41	0.38	0.50	0.43	0.60	0.72	0.75	1.70	0.75	0.8	0.40	0.57	0.50	0.45	0.40	0.49	0.40	0.41
Average Daily Incidents (Major)	6.99	0.75	0.91	0.63	0.68	0.45	0.61	0.76	0.55	0.50	0.98	0.75	0.83	0.75	1.41	1.25	1.31	0.75	0.98	0.75	0.68	0.50	0.61	0.98	0.50
Total Number SDAs	51	0	1	1	3	2	2	2	4	0	0	0	0	0	3	1		0	3	1	0	0	2	0	0
Number of Students with SDAs	28	0	1	1	1	1	2	1	3	0	0	0	0	0	3	1	1	0	2	1	0	1	2	1	1
Positive Behaviour — Students on Bronze	5	5	3	5	4	5	4	7	10	3	6	3	4	5	13	7	0	2	5	3	3	3	4	3	2
Green Slips P'Class P'Week (Av)	17	16	20	13			16	14	13	22	22	17	23	20	23	22	25	21	20	18	22	20			
Student Self-Efficacy — Work Completion	81		83	84	83	88	82	75	83	84	88	73	52	76	81	69	75	82	83	79	83	92	7	77	81
Level of Achievement		80	84	75	64	81	74	63	74	74	79	72	62	73	81	67	3	77	72	76	71	88	55	78	
Help Seeking	72	76	60	75	67	90	81	67	74	77	74	61	55	68	55	76	7	78	75	69	74	85	76	57	73
Motivation	71	70	62	68	78	76	71	75	71	61	80	77	49	66	67	74		61	58	45	48	62	71	73	60
Student Self-Efficacy Score	73	79	72	76	73	84	77	70	76	74	80	71	55	71	71	72		75	72	67	69	82	69		72
Learning Walls — 3rd Teacher Walls Updated		Y	N			Y	Y	N	N	Y	Y	N	Y	Y	N	Y	N	Y	N				N	Y	N
Building Collective Teacher Efficacy — Team Data Wall Updated	98%	Y	Y	Y	N	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
Team Activity Cycle Completion	96%	Y	Y	Y	N			N													Y	N	Y	Y	N
HPT Job Satisfaction	81	76	78	64	64	71	74	76	66	87	85	76	74	71	81	82	82	83	82	84	85	86		76	88
HPT Performance Feedback		83	88	80	85	82	77	78	76	94	94	89	93	92	93	87	84	83	86	93	87	86	74		
HPT Peer Support	89	85	89	80	87	82	76	76	74	96	96	94	96	92	96	96	97	9	91	93	94	87	90	8	93
HPT Work/Life & Wellbeing	76	63	75	63	72	76	71	68	68	73	78	74	81	82	84	71	74	73	74	80	77	87	69	2	88
Collective Team Efficacy	82	77	83	72	77	78	74	74	71	88	88	83	86	84	89	84	84	82	86	87	87	87			87
Community Engagement — School Newsletter Engagement	26			34		29		27		29		26		25		26		33		24		23		22
Non Payments (%)	9%		3		3		4												4		9		2		4

The Goldilocks' Zone of Collaboration: Getting It Right!

We began this chapter by identifying the need to 'improve collaboration' as a common (and important) issue facing schools, and the tricky problem of getting collaboration levels right (neither too minimal nor too excessive). Drawing on analogies from fairy tales and Astrobiology we have built the case for the 'Goldilocks Zone' of collaboration to be the optimal state and, in a school context, this is about

optimising the *amount of communication and number of relationships* that each staff member needs to manage.

We also discovered that by using practical principles derived from Brooks' Law and Dunbar's Number we can map communication and relationships across the school which can, in turn lead to improvement in the effectiveness of our team structures, communication channels, meeting strategies and data dashboard design. And, when we optimise our school's collaboration strategy, we enter the 'Goldilocks Zone' of school-wide collaboration which is a place where all staff and students can flourish!

Chapter Summary:

Collaboration is defined as 'working together better to optimise outcomes'.

'The Goldilocks Zone' is a term astrobiologists use to describe the optimal living conditions for humans where the right amounts of various elements are present (as opposed to too much or too little). This analogy can be applied to collaboration in schools to better enable staff and students to flourish.

The two factors which ultimately dictate the extent to which collaboration is minimal, excessive or in the 'Goldilocks Zone' are 'relationships and 'communication' with the corresponding theoretical principles of Dunbar's Number of relationships and Brooks Law of communication.

Dunbar's Number states that (generally speaking) human beings can attend to a maximum of 150 relationships at any given time. For staff, schools need to plan their class numbers and team and group sizes to avoid having too many or too few relationships for staff to manage.

Brooks Law of communication states that as teams get larger the time it takes to complete tasks and the risk of errors increases. For a school to flourish communication needs to be efficient and effective through team channels to avoid the trap of excessive 1:1 communication which creates cognitive overload.

Enhancing effective team communication is about developing effective team meeting agendas and protocols as well as creating data dashboards which enable clear and up to date analysis of student performance in connection with influencing variables such as attendance, behaviour and wellbeing.

Collaborating In The 'Goldilocks Zone'

Next Steps: Toolkit

- Does your school collaborate in the 'Goldilocks Zone'?

- Complete the *'Collaboration Zones Quiz'* for your 1-page report and action plan.

- Go to: HPTschools.com – Tools – *'Collaboration Zones Quiz'*

HOME   OVERVIEW   COACHING   LEVEL UP   TOOLS   ARTICLES   PAYMENTS   CONTACT   SHOP

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COLLABORATION ZONES QUIZ
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COLLECTIVE EFFICACY AUDIT
CLICK HERE
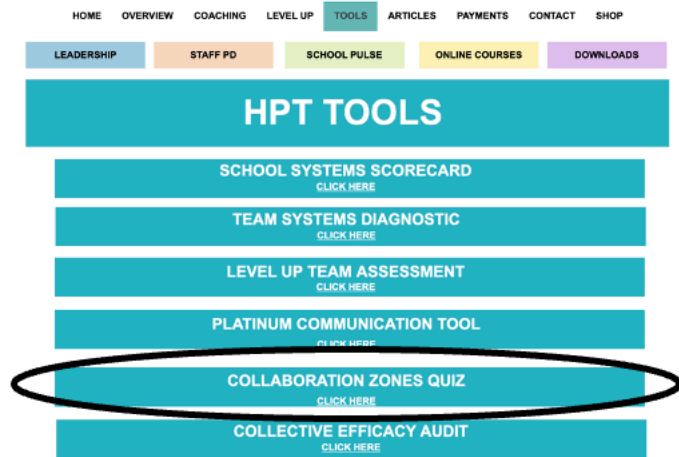
SAMPLE Collaboration Zones Diagnostic Report & Action Plan

Table 1. Collaboration Zones: Status Report

Factors	MINIMAL Collaboration	GOLDILOCKS Zone	EXCESSIVE Collaboration
Factor 1: Relationship Management	RISK OF OVER FOCUS	ACTIVE ENGAGEMENT	RISK OF DETACHMENT
Factor 2: Communication Strategy	MUSHROOM SYNDROME	INFORMED & UP TO DATE	OVERWHELMED & CONFUSED
Factor 3: Meeting Effectiveness	INEFFECTIVE & BORING	EFFECTIVE & PRODUCTIVE	INEFFECTIVE & OVERLOADED
Factor 4: Data Dashboards	LACKING INFORMATION	INFORMATIVE & INSIGHTFUL	INFORMATION OVERLOADED

Table 2. Relationships & Communication: Detailed Analysis

Factor	MINIMAL Collaboration	GOLDILOCKS Zone	EXCESSIVE Collaboration	IMPROVEMENT STARTEGY...
1a. Relationships: Total No.	<50	50-100	100+	
1b. Relationships: Team Membership	Member of Workforce Only	Assigned to Key Team: Priority Over Others	Assigned to Multiple Teams: Equal Priority	
2a. Communication: Flow	Ad Hoc Team, School & Individual Comms	Frequent & Useful Comms (No Extra 1:1)	Frequent Comms & High Extra 1:1 Comms	
2b. Communication: Response Pattern	Withdrawn & Avoidant	Focused & Engaged	Frustrated & Defensive	

Table 3. Meetings & Dashboards: Detailed Analysis

Factor	MINIMAL Collaboration	GOLDILOCKS Zone	EXCESSIVE Collaboration	IMPROVEMENT STARTEGY...
3a. Meetings: Scheduling	Monthly (or less frequent)	Weekly / Fortnightly	Daily – 2-3 Times Per Week	
3b. Meetings: Effectiveness	Ineffective & Boring	Effective & Productive	Ineffective & Overloaded	
4a. Dashboards: Discussions	Compliance Driven	Data Informed / Insightful	Tail Wagging The Dog	
4b. Dashboards: Accessibility	Lacking Information	Adequate Information	Too Much Information	