



Learning Journey IV – Feedback Makes Learning Visible

Our 2019 series of staff-written reflective articles illustrating the importance of sharing practice at Clarkson Community High School.



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Preface

“Oor wee school’s a guid wee school,
It’s made fae bricks and plaster,
The ony thing that’s wrang wi it,
’s the baldy-heided master”. (Scots, Anon)

I’m somewhat bemused that a good 40 years after my dad told me this ditty, that, I’m not far off being that follicly-challenged master myself! But certain attitudes don’t change much, whether from students, vocal parents or rabble-rousing politicians – school could be so much more effective if *only* teachers could be “better”.

Catchment boundaries and local “competition” with both subsidised private schools and independent public schools putting pressure on enrolment numbers (and the myriad budgeting issues that spring from such) AND social disadvantage experienced by a sizeable minority of our cohort certainly all contribute to make Clarkson a challenging environment to teach in. However, such environments can also offer the opportunity for *significant*, rather than just incremental improvement. When interventions work well, they can work extremely well.

And since we are limited in our ability to change many of the external factors that impact us, our major opportunity for improvement is in our teaching. At Clarkson a key manifestation of this attitude of ongoing improvement is our Learning Journey series. These sets of articles provide not only a chance to share concepts and insights we’ve picked up in the classroom (particularly where such are developed from the works of eminent educational researchers), but also to develop ourselves and our own capability to grow as educators. Whilst every new teacher is trained to be reflective, it is only when we journal these reflections that our insights truly become tangible. And when we publish, we make them visible.

Hence the title of Learning Journey IV is Feedback makes learning visible. Like ‘reflection and journaling’, feedback is perhaps the most effective tool to facilitate self-improvement, so it makes sense to particularly focus on the many ways we can use feedback to build capability both in our students, but also ourselves (including how I can still perfectly remember a poem my father told me 40 years ago, and how that learning is essential in how we teach to improve knowledge retention). It also ties into our ongoing data-driven focus on improvement, our focus on Hattie & Zierer’s (2017) *10 Mindframes for Visible Learning* (documented in our Learning Journey 3), but in this collection we’ve also introduced some of the ways we are trying to implement high quality teaching strategies identified in the WA DoE Directorate’s *Focus 2019*, particularly relating to the focus on growth, not just attainment.

At Clarkson our goal is not simply to batten down the hatches and try to weather the storm, but to consider alternative options to harness the often-unpredictable energy of our wards. Our collective objective of iCORT; intentional Care, Optimism, Respect and Trust, are the positive behaviour standards we model; data underpins how we navigate decisions; and the invitational leadership model encourages everyone’s contribution to how we can improve in our service. The Learning Journey series is a demonstration of our thought leadership, from teachers at the storm front, showing how we’ve tried to put research driven ideas into practice, and with what results. It also shares evidence of a positive shift cultural change in at least some key people in our student body in consciously recognising and adopting the iCORT values. Contributing these articles is no minor task, and I commend all the authors for giving up their time to put virtual pen to paper to share their well-considered thoughts. As a relatively new school educator, the opportunity to gain the insights of more experienced teachers and educational leaders invaluable in accelerating my own teaching competency. Given the breadth of competencies and knowledge required to operate effectively in a school environment, I find these short-cuts to deeper understanding, whether of the potential unintended impacts of suspension, or ideas as to how to use the technology platforms available to us more effectively as just two examples, of immediate value.

As professional educators I believe our responsibility is not just to do our job, but also to improve our profession. And the Learning Journey series, initiated and championed by our principal John Young, is a key part of Clarkson Community High Schools’ ongoing contribution to this objective. As every busy professional knows,

there is a tendency to over-focus on priority tasks, and as all teachers know, the priority list of lesson plans, assessment preparation, marking, writing reports, parent phone calls, intervention documentation is never completed. However, the downside of only focusing on priorities is that important, though lower priority tasks never get completed. Whilst reflecting, journaling and publishing Learning Journey articles are never the highest priority task, they are, I believe, very important ones; providing opportunities to build deeper personal understanding, but also to create legacy; to help take the profession we are proud to be part of a step further in the right direction.

We hope that this latest series of articles and reflections stimulate ideas. Whether new ideas for the classroom; improvement of your practice; or whether and how you are growing your profession. As always, if there is any feedback, positive or otherwise, we welcome it with open arms.

Dr Steven Laing

Learning Journey IV Editor

It is only with the heart that one can see rightly; what is essential is invisible to the eye

John Young

John Young is the Principal of Clarkson Community High School in Western Australia. He has worked for the Department of Education since 1981. He is a member of the Board of Trustees for the International Alliance for Invitational Education. John has been key in building a tradition of encouraging staff to undertake and journal research-based improvement at CCHS.

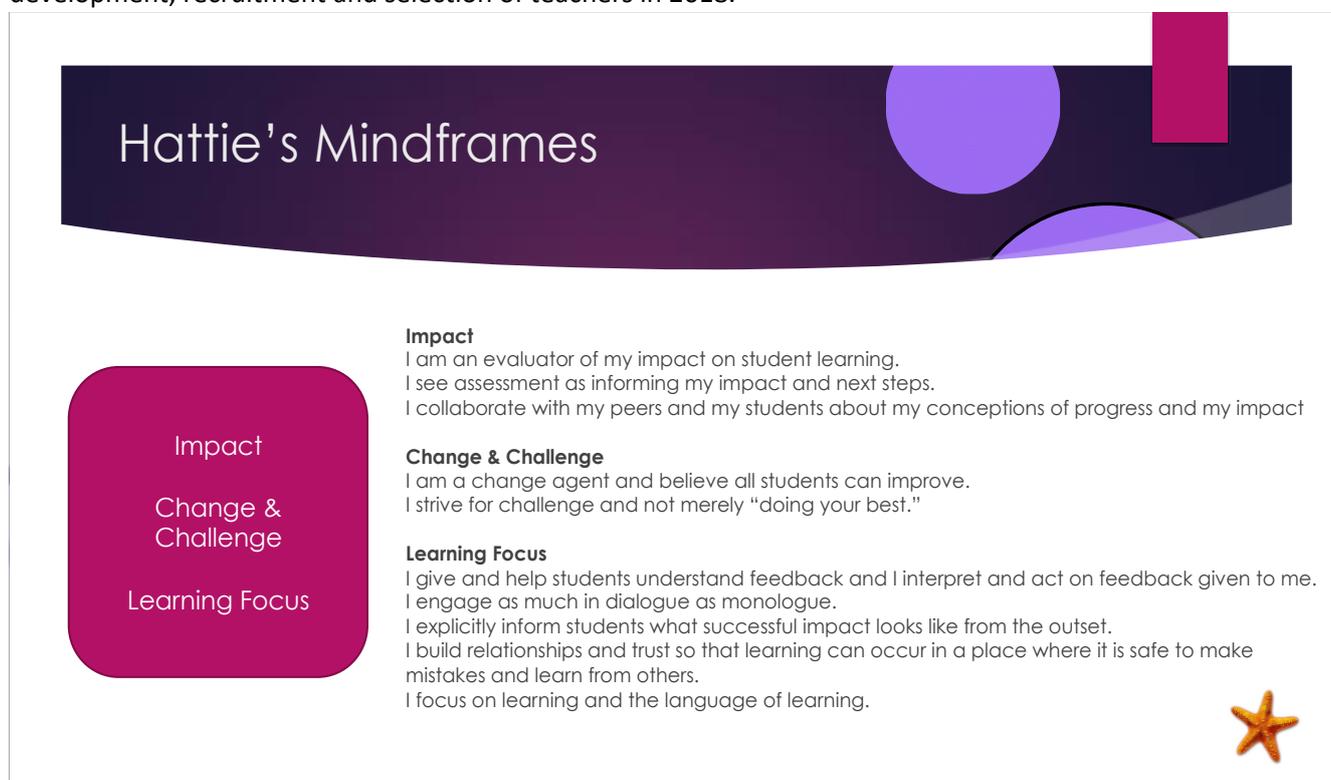


“It is only with the heart that one can see rightly; what is essential is invisible to the eye.”

I like to ponder the above quotation from Antoine de Saint-Exupéry’s *The Little Prince* (1945, p. 70) as I have thought learning should always be serious fun and so I asked an expert and here was his response—

The major notion of VISIBLE is to help make the invisible more visible. Yes, learning is not often visible; yes 80% of what happens in a class a teacher does not see or hear; and much more – so how to resource schools to better understand these essential attributes. The Little Prince is so right – which is why we need to be concerned especially with the big hearts that most teachers have to truly make the difference. (J. Hattie, personal communication, July 30, 2018.)

John Hattie and Klaus Zierer’s, *10 Mindframes for Visible Learning: Teaching for Success* (2018) provided a coherent vision to guide reform at Clarkson Community High School (CCHS). Visible Learning research provided a framework for school improvement. The understanding of school vision was a useful focus for the professional development, recruitment and selection of teachers in 2018.



Hattie's Mindframes

Impact
I am an evaluator of my impact on student learning.
I see assessment as informing my impact and next steps.
I collaborate with my peers and my students about my conceptions of progress and my impact

Change & Challenge
I am a change agent and believe all students can improve.
I strive for challenge and not merely "doing your best."

Learning Focus
I give and help students understand feedback and I interpret and act on feedback given to me.
I engage as much in dialogue as monologue.
I explicitly inform students what successful impact looks like from the outset.
I build relationships and trust so that learning can occur in a place where it is safe to make mistakes and learn from others.
I focus on learning and the language of learning.



Figure 1: Hattie’s Mindframes

For Hattie and Zierer, teachers’ passion and enthusiasm manifest in ten mindframes (figure 1). The first three relate to impact, the next two to change and the last five to learning focus. Visible Learning research indicates successful teachers’ behaviour is based on the mindframes. Mindframes demonstrate that teachers are

evaluators, change agents, learning experts, and seekers of feedback who are engaged with dialogue and challenge.

The focus of the mindframes is to move from what works to what works best. Research shows 90-95% of what teachers do increases student achievement. Students are learning all the time and sometimes despite the teachers. We need to do better than this.

Visible Learning research tells us WHY some interventions have a greater impact. It shows the difference between low and high impact interventions. The impact has less to do about structures and more to do with teacher expertise. What works best works best with most students. Teachers must know their impact and not simply practise interventions as instructional strategies.

At the start of 2018, teachers at Clarkson implemented one mindframe per week with each class. Teachers revisited their professional learning and school-based understanding of behaviourism, cognitivism and constructivism. Research on mindframes is data-driven, shaped by empirical evidence.

The focus on mindframes meant classroom management and instructional skills improved. The implementation of motivational factors in an instructional sequence became a clearer priority. Mindframes encouraged teachers to think about their behaviours. Inviting student involvement is crucial ([Young, 2015](#)).

It is teachers' thinking that is important. How teachers understand their impact and search for feedback to improve learning. The clear focus at CCHS was using mindframes to accelerate students' learning. A move to what works best in the classroom.

Hattie and Zierer (2018) argue that mindframes become visible. They answer the question of what they are doing. They also answer the question of how and why they are doing what they are doing.

Teacher behaviour affects classroom climate. Mindframes encourage teachers to think about how they behave in the classroom. Teachers' enthusiasm for mindframes was motivational and Visible Learning research generated interest in reform. Hattie and Zierer's work created a positive momentum as mindframes helped to change teachers' thinking across CCHS.

Most Australian kids spend about 15,000 hours at school taught by more than fifty teachers. Some teachers make an impact. Some are soon forgotten. Mindframes help to explain why some teachers have greater impact. Measuring impact is important when determining an instructional pathway for each student—

One of the most crucial questions is whether teachers want to know about their impact and make it visible. Teachers who have set themselves this goal and are consistently trying to implement it are fundamentally different from teachers who do not ask themselves this question. (Hattie & Zierer, 2018, p.2)

Teachers who ask the question about their impact act intentionally. Intentionality is the capacity to connect conscious thought with intentions and behaviour. Intentionality is significant for those teachers and school leaders who act with conviction for reasons that are irrefutable.

At CCHS, each decision is intentional as the leadership team starts with why. Intentionality is the key to successful learning—

It is not enough for teachers to believe their students can succeed and to show them that they care; teachers must also know what they're doing in the classroom. Or to be more precise: they must know why they're doing what they're doing in the classroom. (Goodwin, 2011, p. 26)

Intentionality is the precursor that underpins intentions—

It has been said that change is inevitable, but growth is intentional. If this is true, then intentionality is crucial to becoming a great teacher. (Hubbell & Goodwin, 2013, p. 182)

10 Mindframes for Visible Learning: Teaching for Success (Hattie & Zierer, 2018) was an inspiration. In 2018, a dozen CCHS teachers wrote about their work as classroom practitioners implementing mindframes. [CCHS Learning Journey 3](#) (Jones, 2018) built upon a now ongoing tradition of undertaking and documenting research-based improvement at CCHS.

References:

- Goodwin, B. (2011). *Simply better: Doing what matters most to change the odds for student success*. ASCD, Alexandria, VA. Retrieved from <https://ebookcentral.proquest.com>
- Hattie, J. & Zierer, K. (2018). *10 mindframes for visible learning. Teaching for success*. Routledge, London.
- Hubbell, E. R., & Goodwin, B. (2013). *The 12 touchstones of good teaching: a checklist for staying focused every day*. Alexandria, VA: ASCD, 182.
- Jones, T. (Ed.) (2018). *Learning Journey 3: Evaluating our impact at Clarkson Community High School*. (unpublished). Retrieved from: <http://www.clarksonchs.wa.edu.au/index.php/docman-home/published-articles/160-clarkson-chs-learning-journey-3>
- Saint-Exupéry, A. (1945). *The little prince*. William Heinemann, London, UK.
- Young, J. (2015). Inviting student involvement. *Principal Matters, 105 (Summer 2015): 2-5*. Retrieved from: <http://www.clarksonchs.wa.edu.au/index.php/docman-home/invitation-education/146-inviting-student-involment-and-article-in-principal-matters-summer-2015>

Painting the Picture – Using feedback to develop the learner in Visual Arts

Ellie Hoyer

Ellie Hoyer joined Clarkson Community High School in January 2018 as a Visual Arts teacher. She strives to be an artist-teacher hybrid to maintain a plethora of content knowledge to passionately teach her subject. Ellie has displayed her artwork at The Art Gallery of Western Australia as part of Year 12 perspectives; consequently, she hopes to give students the opportunities that were given to her in school. Ellie's time at Clarkson has developed her philosophy that passion for teaching and art will ultimately impact student learning.



An invitational stance "flows like water, reflects like a mirror, and responds like an echo." (Chuang-Tse, quoted in Purkey & Novak, 2015, p. 6)

Inviting students to learn is an ethical process involving continuous interactions between student and teacher. A principle of the invitational framework focuses on education as a collaborative, cooperative activity. Invitational education promotes the systematic involvement of students in their education, thus creating student voice (Charteris & Smardon, 2018). This begs the question; how do teachers adequately involve students in their education?

This depends on the subject, the teacher and the student. Effective teachers subscribe to the belief that each student is individual, unique, able, and valuable and should be treated accordingly (Purkey & Novak, 1996). Given this belief, it is no surprise that involving each student may require different approach. In the Arts, I consistently use feedback as an effective tool for encouraging student voice within and beyond the classroom. In its best form, Invitational Theory becomes invisible or effortless within the classroom; it places students front and centre to produce the best outcomes for the learners (Purkey & Novak, 2015).

Behavioural Feedback

Feedback is an effective way to encourage student involvement. For some students this can be a more casual interaction. I employ this technique not only in my discourse of art but also behavioural expectations. Correcting behaviour takes initial priority over visual art discourse, as it is what sets the 'tone' for the classroom environment. Students are encouraged to reflect on the impetus for unsuitable behaviours, rather than merely reprimanding them. While reprimands are still often appropriate, the follow up is the driving force for behavioural improvements. A *zero-tolerance* approach does not

get in the mind of the student, does not encourage them to question their own behaviours, and does not teach them to self-regulate as a functioning member of society. The feedback begins with the teacher and is encouraged to continue with the student after the interaction. While this may not always lead to student reflection, in the least it may lead to Care, Optimism, Respect and Trust between teacher and student (Purkey & Novak, 2015), which are Clarkson's core values.

For one student, my approach differed. Rather than reflecting on the actions of his behaviour, I asked this student to determine an appropriate consequence for his actions. I set the consequence at a 15-minute detention and asked him to determine the time he deemed appropriate for his behaviour. The student decided that 10-minutes would be an appropriate detention for an uncaring act towards another student. This promoted acceptable behaviours and empathy for fellow students. As a reward for his honest and reflective decision, I reduced his time further and expressed that his decision was caring and responsible. Given this, he was taught that reflection is good, and that we should not be too 'hard' on ourselves when we make poor choices. Rudduck and McIntyre (2007) noted that it is important to "talk with pupils about things that matter to them in the classroom and school that affect their learning" (cited in Rodgers, 2017, p.89). For the most part, people wish to be inherently 'good', therefore it would be prudent to talk to pupils about how to best achieve this.

Using effective behaviour management creates an inviting classroom where students feel valued and able (Purkey & Novak, 1996). The ultimate goal is to create an environment where students are kind to each other as this is the expectation they are held to and they are taught to hold themselves to. This needs

to occur alongside engaging, rich content, to help students best learn.

Content Feedback

Providing and receiving feedback is a successful way to engage students in the classroom. Interest has moved away from assessment *of* learning (summative) to assessment *for* learning (formative). Self-assessment is an important aspect of the visual art discourse, whereby students reflect on and evaluate the quality of their work and identify strengths and weaknesses (Wanner & Palmer, 2018). In the classroom, I often employ this informally through discussion with the students. I also encourage students' reflection on the elements and principles of art that underpin dynamic art pieces. I employ questions such as; how have you used a variety of lines? Where is your point of focus/emphasis in the artwork?

These questions can also be answered formally in an artist statement or reflection. The majority of students enjoy being given the opportunity to reflect on their artwork, almost as a moment to inform the reader of each and every choice they made. In doing so, they give themselves feedback about how they feel about their production and what they might do differently moving forward.

Peer feedback is directly linked to self-assessment where peers provide feedback to the students about how they are progressing (Wanner & Palmer, 2018). In Visual Art this is easily achieved informally. In the concluding 5 minutes of the lesson I give students the opportunity to show their peers their practical or written work. I do not ask the peers to provide criticism, but rather discuss objectively which elements and principles have been used in the artwork. This gives developing artists an opportunity to observe where the elements and principles have been effectively used in their piece. Feedback is an essential methodology that encourages learning and growth for both students and teachers. Recently I asked students for feedback on the classwork. We made a collective decision that the class would make their own visual diaries, thus giving them a sense of

ownership of their artwork. While I am not sure of the outcome of this yet, it will be an opportunity to reflect and obtain feedback on the strengths and weaknesses of the course (Wanner & Palmer, 2018).

Within the Arts, feedback is an essential part of the discourse. Behavioural and content feedback creates the stepping-stones to a well-managed, meaningful learning experience for students. It builds student voice by developing the confidence of the learner. Receiving feedback as a teacher breaks down the metaphorical wall between student and teacher and gives the students more insight into the intentional Care, Optimism, Respect and Trust (I-CORT) that is being practiced and encouraged in the classroom and school by staff and students alike.

References:

- Wanner, T., Palmer, E. (2018). Formative self-and peer assessment for improved student learning: the crucial factors of design, teacher participation and feedback. *Assessment & Evaluation in Higher Education*, 43:7, 1032-1047, DOI: 10.1080/02602938.2018.1427698
- Purkey, W.W., Novak, J.M. (2015). An introduction to invitational theory. Retrieved from: https://www.invitationaleducation.org/wp-content/uploads/2019/04/art_intro_to_invitational_theory-1.pdf
- Purkey, W.W., Novak, J.M. (1996). *Inviting school success: a self-concept approach to teaching, learning and democratic practice*. (3rd ed.). Belmont, Calif.: Wadsworth Pub.
- Charteris, J., Smardon, D. (2018). The politics of student voice: unravelling the multiple discourses articulated in schools. *Cambridge Journal of Education*, 49:1, 93-110. DOI: 10.1080/0305764X.2018.1444144
- Rodgers, C. (2018). Descriptive feedback: student voice in K-5 classrooms. *Australian Association for Research in Education*, 45:87-102. DOI: 10.1007/s13384-018-0263-1

Maths Pathway turns high-impact pedagogy research into practice

Adam Inder

Adam Inder was the Head of Applied Science at Clarkson Community High School from 2017 to 2018. He is passionate about school leadership as well as education policy more broadly. Adam has written articles on a range of topics, including social segregation, Visible Learning and classroom practice. His works have been published in national magazines such as *Australian Educational Leader* and *Education Today*. His talk at TEDxUWA 2017, “Drawing The Line on Educational Disadvantage”, explored how small tweaks to education decision-making can have enormous ramifications for those navigating the education system with low socioeconomic status. Adam currently works as the Data Analysis & Curriculum Innovation Manager at Lake Joondalup Baptist College, helping to build a culture of school-wide research-driven pedagogical improvement linked to data-based decision-making.



When talking to both the expert in education and the uninformed, there is a common refrain which claims that the current education system is broken for a variety of reasons. We all know an example of a student who has fallen through the cracks or has simply not been the *right fit* for school – you may even be someone who considers yourself part of this category. The reality is that the teacher’s job is becoming more complex as expectations pile up. Meanwhile, the world around us is rapidly changing through the development of technology, increased globalisation and the job availability tied to these two things. It can seem at times like we have more problems than solutions.

Maths Pathway is the name of an Australian organisation which was featured in the 2019 Term 1 edition of *Education Today*. They provide a teaching and learning model which (put simply) provides rigorous learning opportunities within an individualised framework. Teacher experiences of those who have used the model suggest that this model is a potential (partial) solution to the overwhelming demands placed on teachers and the tendency for some students’ needs to not be met within the traditional classroom. The justification for this claim will be unpacked below by referring to the research which underpins the thinking, as well as the data which I have witnessed in two schools – one with a low socioeconomic status and one with a high socioeconomic status. Although Maths Pathway is only used in the Mathematics classroom, I am certain that its model, and the thinking behind it, would have scope to be translated into other subject areas.

What is Maths Pathway?

Maths Pathway teaching and learning model assists teachers to facilitate a unique teaching and learning model. To date, over 57,000 students are participating in the Maths Pathway style of teaching and learning (Maths Pathway, 2019a). Although Maths Pathway originated in Victoria, schools all across Australia – from Katherine to Christmas Island – are now using its model.

Maths Pathway performs extensive diagnostic tests to determine the current mathematical level of any student, including any gaps they may have in their skills and knowledge. Students complete chunks of work built around a mathematical concept called *modules* which are either assigned by teachers, chosen by students or a mix of both. For students to *pass* the module and move on to more challenging modules, they must score 100% in a module at the end of a two-week test cycle. The 100% is indicative of demonstrated mastery and is considered strong evidence that the gap in understanding has been closed. At the end of each test cycle, teachers host individual feedback meetings with students where feedback on effort, growth and accuracy are explored and students set goals to work towards for their next test cycle. Mathematical rich tasks are embedded into the test cycles which will be explored in the corresponding section below.

The following sections will address the research behind five of the eight components of [the Maths Pathway] Learning and Teaching Model (figure 1), reinforcing how and why these components agree with the research behind effective teaching and learning.



Figure 1: The eight components of the Maths Pathway Learning and Teaching Model (Maths Pathway, 2019b)

1. Personalised Learning

In the 2018 Gonski review, it is claimed that students “should be challenged and supported to progress and excel in learning in every year of school, appropriate to each student’s starting point and capabilities.” (Department of Education and Training, 2018). Geoff Masters discusses this in a 2018 article, acknowledging that “most teachers understand this and attempt to teach every student at an appropriate level. But they work within external constraints.” (Masters, 2018, para. 6). Logistically, teachers find personalised learning extremely difficult to execute effectively. Being bound to a crowded curriculum gives little opportunity to differentiate to such an extent. Teachers being increasingly time-poor during the term means that flexible, yet individually tailored lessons are difficult to execute as needs arise.



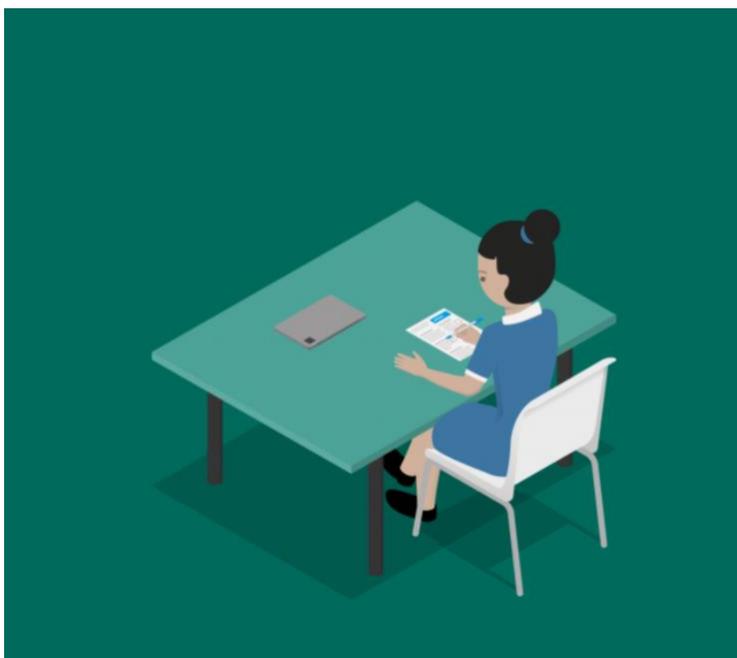
(Maths Pathway, 2019b)

Masters gives a recommendation for an amendment to these constraints: “Instead of packaging the curriculum into year levels, wherever possible the curriculum would be presented as a sequence of increasing proficiency levels in a subject.” (Masters, 2018, para. 7) Maths Pathway does exactly this. Beginning with an extensive series of diagnostic tests, students’ current levels of learning are determined and recalibrated as students undergo modules predicted to be within their *zone of proximal development* (Vygotsky, 1987). As discussed in the book *Breakthrough*, classroom practice should be structured into a practical, precise and highly personalised manner for each student, with progress (and naturally, increased achievement) being the aim for all students (Fullan, Hill, & Crévola, 2006). Much of John Hattie’s *Visible Learning* research agrees with personalised learning, with *Appropriately challenging goals* demonstrating an effect size of 0.59 and *Teacher expectations* demonstrating an effect size of 0.43 – both above the *hinge point* of 0.40 (Visible Learning Plus, 2018). If teachers can use Maths Pathway to set appropriately challenging goals and calibrate their

expectations of students to this appropriate level of challenge, we are likely to see increased success in the classroom.

2. Differentiated Assessment

With personalised learning, we require a means of providing differentiated assessment to students. As mentioned above, for students to *pass* any chosen module and move on to more challenging modules, they must score 100% in a module at the end of a two-week test cycle. Hattie's *Visible Learning* research has shown us that mastery learning has an effect size of 0.57 (Visible Learning Plus, 2018). The assessments incorporate an online test section and also a written section, mirroring the balance in online and written components of all modules. Technology in mathematics is shown to have an effect size of 0.33 (Visible Learning Plus, 2018), but we are still bound by a syllabus that relies on written paper tests for Years 11 & 12. Not only this, but it has been shown that note-taking by hand is better for retention and deeper processing than typing on a keyboard (Mueller & Oppenheimer, 2014). Maths Pathway manages to find a balanced position in the middle without making the process too awkward for students and teachers to operate.



(Maths Pathway, 2019b)

3. Data-informed Feedback

Following receiving their test results, students have an opportunity to personally reflect on the work they have done. *Evaluation and reflection* has been shown to have an effect size of 0.75 (Visible Learning Plus, 2018) which indicates a very high potential driver of success.

When students' complete assessments, they are given feedback based on three areas of data:

- Effort (The number of modules a student completes)
- Accuracy (The number of modules a student has mastered as a proportion of their total modules completed)
- Growth (The number of modules the student demonstrated mastery of)

When a student completes work for a high number of modules, it means that they are putting lots of effort in to head towards a higher growth rate. If a student has low accuracy, it means that they are not mastering as many modules as they attempt, meaning that they are not studying effectively or are perhaps overstretching themselves with the workload. Growth is a measure which compares to expected progress. When achieving a 100% growth rate, a student is gaining the equivalent of one year's worth of learning for one year of instruction.

With this suite of data at their fingertips, the teacher can provide targeted feedback to the students. At the end of every test cycle, a teacher has a short feedback meeting with a student to guide them for the next cycle. It may include reference to their learning goals, how much they have written in their book or may look at their

effort in preparing for their test. Feedback is centred around growth, as Maths Pathway creators are strong advocates for promoting a growth mindset (Dweck, 2006). This is perhaps my favourite element within the Maths Pathway *recipe*. This thinking is in agreement with the recommendations from the 2018 Gonski review (Department of Education and Training, 2018). Meetings adhering to Maths Pathway recommendations are short but targeted and practical, indicating an understanding of even the most recent of Hattie's research on feedback:

That students are taught to receive, interpret and use the feedback provided is probably much more important than focusing on how much feedback is provided by the teacher, as feedback given but not heard is of little use. (Hattie & Clarke, 2018, p. 5)

4. Targeted Explicit Teaching



(Maths Pathway, 2019b)

Explicit teaching (sometimes over-simplified as the 'I do, we do, you do' model) is a highly effective teaching strategy, as indicated by its effect size of 0.57 in the *Visible Learning* research (Visible Learning Plus, 2018). As work is differentiated for every student, Maths Pathway uses explicit teaching in the form of *mini lessons*. Students completing a common concept are grouped together. While other students are working independently on their own modules, the small group of students are explicitly taught fundamental concepts relevant to their common module(s). When students are working independently, if they require help, they are able to identify students who have mastered the module they are attempting. This allows them to seek help in the form of peer tutoring – which has an effect size of 0.57 (Visible Learning Plus, 2018).

5. Rich Learning

A common misconception about Maths Pathway is that it is a *set and forget* teaching strategy which places students on computers and leaves them to their own devices. Implemented correctly, this is far from the case. Test cycles are broken up with sessions of *rich learning* which are comprised of *high-ceiling, low-floor* activities which may involve elements of collaboration. These exercises promote critical thinking as in agreement with mandates set by the Australian Curriculum General Capabilities (Australian Curriculum Assessment and Reporting Authority, 2019b) and other widely agreed upon documents such as *The Melbourne Declaration on Educational Goals for Young Australians* (Ministerial Council on Education, Employment, Training and Youth Affairs, 2008). Rich learning tasks for a variety of curriculum topics and skill levels are provided, meaning that teachers do not need to reinvent the wheel – a task we teachers are particularly renowned for undertaking *ad infinitum*.



(Maths Pathway, 2019b)

Success irrespective of socio-economic status

In 2018, I was working at Clarkson Community High School (CCHS), a socioeconomically disadvantaged public school in the northern suburbs of Perth, Western Australia. CCHS has an Index of Community Socio-Economic Advantage (ICSEA) value of 946 (Australian Curriculum Assessment and Reporting Authority, 2019a), whereas an ‘average school’ in Australia has an ICSEA value of 1000, indicating the disadvantage that CCHS experiences. 2018 was the first year of CCHS implementing Maths Pathway, starting with its use in the Year 7 Mathematics classes. CCHS is a very complex environment to work in – student transiency is extremely high, as many as 85% of students have a language background other than English (Australian Curriculum Assessment and Reporting Authority, 2019a) and teachers need to consistently demonstrate effective behavior management in order to maintain classroom order. Despite these complications, CCHS Mathematics classrooms found great success in their use of Maths Pathway, and this has continued into 2019 (see figure 2).

Year	Grade	1	2	3	4
2018	7	102%	109%	103%	101%
2019	7	121%	108%	97%	N/A
	8	114%	138%	177%	118%

Figure 2: Clarkson Community High School class average growth rates 2018-2019

At CCHS, the overall trend seems to be that classes experience average growth rates of over 100%. This means that students learn, on average, over one year’s worth of content for one year of instruction. Many studies confirm that a student attending a low-SES school is likely to have lower results than a similar student who attends a high-SES school (Organisation for Economic Cooperation & Development, 2016; Perry & McConney, 2010). For a disadvantaged school which is prone to so many negative compositional effects, achieving at or above the expected level of growth is a tremendous victory. Studies have shown that students from low-socioeconomic status (SES) backgrounds have the most to gain from high-quality teaching (Leigh, 2010) and Maths Pathway provides a structure to facilitate this.

In 2019, I have started my new role at Lake Joondalup Baptist College (LJBC) - a high-ICSEA independent school approximately ten minutes south of CCHS. LJBC has an ICSEA of 1112, indicating a considerable level of advantage above an average school. LJBC had already implemented Maths Pathway for two years prior to my arrival. The third year is of particular interest (see figure 3), as we will see Year 7s who started using the program now sitting NAPLAN as Year 9s. We are curious to see how their development in the classroom will translate into the realm of high-stakes testing.

Year	Grade	1	2	3	4	5	6	7
2017	7	133%	125%	142%	153%	138%	138%	134%
2018	7	178%	145%	133%	155%	207%	128%	219%
	8	122%	102%	118%	114%	100%	92%	78%
2019	7	218%	236%	205%	154%	196%	172%	N/A
	8	166%	184%	140%	165%	114%	163%	N/A
	9	82%	65%	126%	90%	85%	98%	N/A

Figure 3: Lake Joondalup Baptist College class average growth rates 2017-2019

At LJBC, we can see many classes performing far above the 100% growth rate. It is noted that the Year 9 cohort in 2019 is experiencing many growth rates below 100%. As we have only taken the average from Term One, this sample is not as reliable as other years. Nonetheless, it does spark some questions about our approach for this uncharted area. Firstly, we are now dealing with Year 9 students – a year group renowned for unusually poor behavior linked to their hormones and neurological development. Secondly, many students with learning gaps as far back as Year 1 level have now likely filled these gaps – the ‘sugar rush’ has worn off and students are tackling conceptual content more appropriate to their level of cognitive capacity. Overall, a historical pattern of growth and success as indicated by growth rates of over 100% has been observed.

Despite the effect size of 0.52 that socioeconomic status can have on learning (Visible Learning Plus, 2018), the considerable benefits which Maths Pathway provide in amending the contemporary structure of the mathematics classroom seem to have a greater impact based on the data seen above. Such a comprehensive framework for teaching and learning offers hope for the future that all students – regardless of their background – can experience high academic progress.

References

- Australian Curriculum Assessment and Reporting Authority. (2019a). Clarkson Community High School. MySchool. Retrieved from <https://www.myschool.edu.au/school/48247/profile/2018>
- Australian Curriculum Assessment and Reporting Authority. (2019b). General Capabilities. Australian Curriculum. Retrieved from <https://www.australiancurriculum.edu.au/f-10-curriculum/general-capabilities/>
- Australia. Department of Education and Training, (issuing body.) (2018). *Through growth to achievement : report of the review to achieve educational excellence in Australian schools*. Department of Education and Training, Canberra, ACT
- Dweck, C. S. (2006). *Mindset: the new psychology of success*. New York, NY: Random House.
- Fullan, M., Hill, P., & Crévola, C. (2006). *Breakthrough*. Thousand Oaks, CA: Corwin Press.
- Hattie, J., & Clarke, S. (2018). *Visible learning: Feedback*. Abingdon, UK: Routledge.
- Leigh, A. (2010). Estimating teacher effectiveness from two-year changes in students' test scores. *Economics of Education Review*, 29(3), 480-488. doi:10.1016/j.econedurev.2009.10.010.
- Masters, G. (2018, May 11). Gonski's model for schools. *Teacher Magazine*. Retrieved from <https://www.teachermagazine.com.au/columnists/geoff-masters/gonskis-model-for-schools>
- Maths Pathway. (2019a). About Us. *Maths Pathway*. Retrieved from <https://mathspathway.com/about-us/>
- Maths Pathway. (2019b). Our Model. Retrieved from <https://mathspathway.com/our-model/>
- Ministerial Council on Education, Employment, Training and Youth Affairs. (2008). *Melbourne declaration on educational goals for young Australians*. Melbourne, Australia: Ministerial Council on Education, Employment and Youth Affairs.
- Mueller, P. A., & Oppenheimer, D. M. (2014). The pen is mightier than the keyboard: Advantages of longhand over laptop note taking. *Psychological Science*, 25(6), 1159-1168. doi:10.1177/0956797614524581

Organisation for Economic Cooperation & Development. (2016). *Low-performing students: Why they fall behind and how to help them succeed*. Paris, France: OECD Publishing.

Perry, L., & McConney, A. (2010). School Socio-Economic Composition and Student Outcomes in Australia: Implications for Educational Policy. *Australian Journal of Education*, 54(1), 72-85.
doi:10.1177/000494411005400106

Visible Learning Plus. (2018). 250+ influences on student achievement. Retrieved from
https://us.corwin.com/sites/default/files/250_influences_10.1.2018.pdf

Vygotsky, L. (1987). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.

Owning growth - how changing the focus from grades encourages student-driven learning

Steven Laing

Steve Laing began his high school teaching career at Clarkson Community High School in 2018, teaching Science and Career & Enterprise (having worked extensively in industry since the early 90s after completing a PhD in Microbiology, as well as working as a sessional lecturer teaching employability skills since 2010 at Edith Cowan University in the School of Business and Law). In 2019 he was asked to coordinate the school's Maths Pathway program. This program was started at Clarkson in 2018 for Year 7 students and extended to both Year 7 and 8 students in 2019.



There is an old Irish joke about a tourist visiting far flung Donegal asking a local for directions to Dublin to receive the response, "Well, you don't want to be starting from here". It's not dissimilar to my thoughts on teaching maths at Clarkson Community High School to a new Year 7 class. In 2018 we started using Maths Pathway to firstly teach Year 7, and this year for 2019 Year 7 & 8. Unlike traditional maths programs, Maths Pathway starts the instructional process with some extremely comprehensive diagnostic checks of each students' current level of mathematical capability across all mathematical sub-topics. Analysing the first sets of these results revealed just how wide that range was. Whilst a few were certainly at, or near, level, there were as many at Grade 1 level, with the rest spread fairly evenly in between, although the vast majority had at least some gaps in their maths knowledge from prior years. Whilst differentiating to 3 or perhaps 4 levels of capability within a class is certainly achievable, to do this to 10 plus levels *effectively* is asking a lot.

We are not unique in experiencing such diversity of numeric capability. There is usually a five to eight-year range of ability in your average Year 7 class (Goss & Hunter, 2015). Whilst Clarkson is perhaps toward the more extreme end of the curve in this respect with regard to representation at the lower end of the ability scale, we are far from alone in experiencing this challenge. Commonly, schools will stream their classes in order to narrow the level of capability in the classroom thus easing the teachers' differentiation workload, however evidence is mixed on the efficacy of this approach as a mechanism of improvement for all students (Steenbergen-Hu, Makel & Olszewski-Kubilius, 2016). Moreover, the impact of grouping students in this way at Clarkson would likely exacerbate behavioural issues in the lower ability classes, prevent opportunities for peer-learning, and potentially create undesirable divisions within the school cohort based on ability that thankfully do not appear to be present, creating a somewhat different atmosphere to my own experience of my own public schooling where those at either end of the spectrum received negative attention from the majority in the middle, often discouraging personal extension at the top end and encouraging truancy and delinquency at the other. Furthermore, such an approach goes against our school ethos at CCHS where every student, regardless of their ability, deserves a fair go.

Fortunately, the decision to use Maths Pathway as a teaching and learning model for provides individual differentiation, with each student being provided with a choice of modules to work on based on the knowledge exhibited in their diagnostic tests and prior modules not only worked on, but the contents mastered. The concept of mastery prevents students over-reaching their capability, only moving onto more complex topics when the prerequisites are fully understood. The benefits of this program are most apparent at the extremes. Highly capable students are able to push ahead, not slowed by the pace of the majority thus avoiding the potential for boredom. At the other end, we have those students who have fallen behind early in their maths education, and once behind finding it impossible to catch up have simply given up, persuaded that not only are they not good at maths, they are not good at anything. Finding one such student simply writing "*I am stoopid, I am stoopid*" over and over on a test paper is heartbreaking, particularly when you know how realise how easily students in the early years of education can fall into that hole and then never climb out. For these students, the program provides modules at these very basic levels, allowing the potential to quickly build knowledge, capability, and most importantly self-confidence and self-esteem *if* we can persuade them to turn their mindset around.

This is a critical component of the Maths Pathway program. It is not simply a conversion of modularised maths lessons put onto a digital platform, but a carefully constructed model covering a wide range of best practice interventions and educational theories, that encourage students to take ownership of their own learning. Whilst the impact is seen primarily in their maths ability, these learned capabilities are likely to filter into other areas of their education and personal development too. Two key areas worth highlighting relate back to the intentions of this Learning Journey, namely Feedback, one of the most significant influencers of student achievement (Hattie, 2012); and Growth (and the growth mindset), a key target of the latest yearly WA Education Director General’s action plan documented in Focus 2019 (Department of Education WA, 2018). In discussion with Maths Pathway’s Head of Learning, Michaela Epstein, it is clear that these two areas were very consciously pulled together in the development of the program (personal communication, May 7, 2019).

From a students’ perspective, the main focus of attainment in Maths Pathway is not level, or grade, but growth, with the student viewing their current growth rate in the centre of their “homepage” using the analogy of speed of travel to reflect their rate of growth (Figure 1). Every two weeks students’ complete modules and are tested on the contents of each of those modules the student believes they have mastered. Note that in the previous cycle (Cycle 2) growth, represented by the aeroplane in Figure 1, was slower, revealing a significant attitudinal change resulting in the increased growth rate. A 100% growth rate is equivalent to one years learning in one year, 200% growth equivalent to two years growth in one year. To attain a 100% growth rate, a student needs to complete 6 modules generally over a fortnightly timeframe and show mastery of 3 of them by answering every question for that topic correctly. Modules that are not passed can be tried again, reminding students that this isn’t failure, they just haven’t mastered the subject yet. The teacher is able to let more able or harder working students undertake more modules in the cycle with a pin-code when the student has completed their prescribed number (a figure that can be changed to reflect the student’s ability and drive). This interim teacher touchpoint provides an opportunity to check on effectiveness of module completion, but also to give some feedback and positive encouragement on the *effort* expended by the student, the key component that really underpins high student achievement (Dweck, 2006).



Figure 1: Central graphic on an individual student’s Maths Pathway window.

The more modules undertaken, the greater the opportunity for growth. The model encourages keen students who are able to advance at their own pace. Because the system is online, students can also undertake modules at home, either at evenings or weekends, but also if they are convalescing (without the need for additional teacher time in creating specific resources for such students), or away from school for extended periods (perhaps for cultural reasons). This feature is also useful where parents expect homework for their children, whilst also recognising that homework cannot always be mandatory due to the home conditions of a not insignificant number of Clarkson’s students.

This change of focus away from grades is important, particularly with such mixed ability groups. In her first non-academically written book *Mindset*, Dweck (2006) describes in layman’s terms (and with rather more assertion

than is allowed in academic work!) how grades can cement a fixed mindset in individuals. As we all know, less capable students can quickly give up because “what is the point” or “I’m just not good at maths”. But what is even more revealing is that this can also potentially limit highly capable students from pushing themselves, preferring to “rest on their laurels” of a previous good grade, and worrying that a lower future test mark, (particularly if studied for), will undermine their concept of self-value. I’m sure we all know a number of highly capable students who have fallen into this fixed mindset, causing significant teacher frustration as they underperform.

This focus on growth levels the comparison playing field, such that low or average achieving students (which includes the one whose data is shown in Fig1) can be rightly proud of their achievement, and underlines to them that you can get out what you are prepared to put in. In figure 2 the hatched area reveals the initial level of ability of each student in the class (determined by diagnostic tests), the solid area representing the number of modules mastered since (the *growth*). As can be seen, growth improvements can be seen at all levels of ability, particularly at the lower levels where growth can be significant – initial ability is clearly not always the best indicator of the growth mindset that we are trying to build, and those students whose experience of schooling has generally not been the most positive, have the ability to change. However, as can also be seen, those at the lowest levels may also have the lowest growth – their fixed mindset, no doubt reinforced over a number of years of negative messages, is not an overnight change.

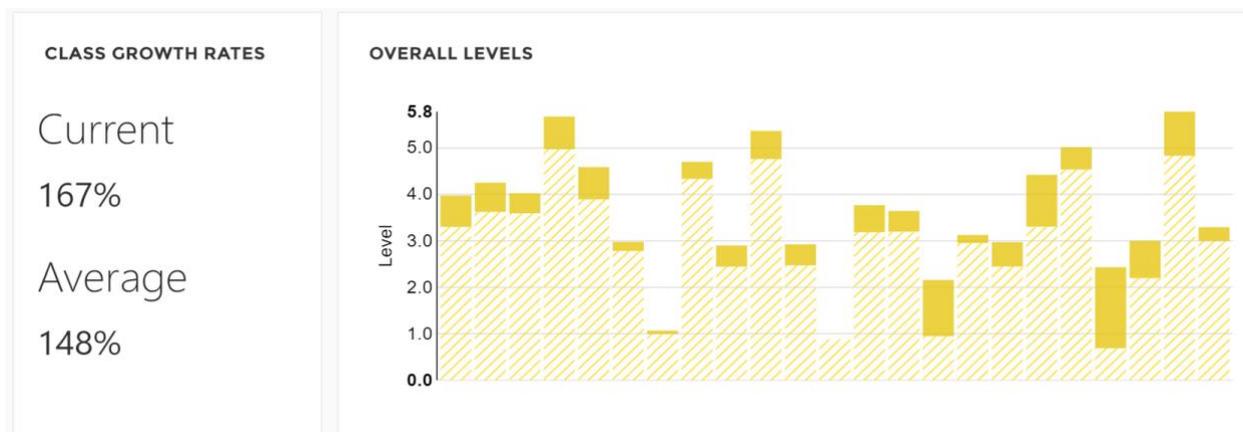


Figure 2. Levels of ability and growth in a Year 7 CCHS Maths Pathway class for one cycle (current) and over 1 semester (average) both at a class and individual level. Note the significant differences in starting ability (hatched part of bars) for different students within the class, as well as the size of capability learned in class (relative size of solid area of bars) is independent of initial ability.

Encouraging a change in mindset can occur at every interaction with students, however we know that formalised feedback is often the most effective when properly implemented. In this regard, the Maths Pathway program has a well-developed mechanism that assists the teacher in providing appropriately constructed feedback (with a significant student involvement) in a very regular timeframe. Finding enough time to provide quality one-on-one time with a student can be difficult at the best of times but trying to do so whilst dealing with the classroom antics of perhaps five or six challenging students demanding attention is definitely tricky. The Maths Pathway program assists greatly in this manner, and it is worth elaborating on as evidence suggests significant improvement over a wider range of student capabilities in the often-challenging classroom environments experienced at low SES area schools.

As previously stated, students are assessed on their progress approximately every two weeks. Individualised tests are generated reflecting the modules the student has undertaken, with students getting the opportunity to revisit some of the online questions they may have incorrectly answered during the test. Following the test and marking, students then have a two-minute session with the teacher to review their progress, and to gain some feedback. However this feedback is not about maths *per se*. Instead students are asked to reflect on their work processes or effort, dependent on how they have performed and the perceived weaknesses that the program has determined. If the number of modules completed is low, the focus is on effort. If the effort is high, but accuracy is low, then students consider the process – for example completing the modules more effectively or spending some time studying prior to the test. The system provides a selection of suggestions appropriate to

the situation, and the teacher helps the student pick the intervention that they believe will best help them improve. This also provides the starting point for the next feedback session, where the student is asked if they followed their selected path. As discussed with Epstein (personal communication, 11th May 2019) the feedback process is purposefully focused on the 2nd and 3rd levels of feedback, namely *process* and *self-regulation* (Hattie & Timperley, 2006). The purposeful avoidance of maths in these sessions prevents them getting over long, but also encourages independence from the teacher as the sole source of assistance. Importantly it also helps teachers avoid praising a students' "*maths ability*", as this may inadvertently encourage a fixed mindset, instead emphasising the reward for their effort, encouraging the growth mindset that we are aiming to achieve (Dweck, 2006).

Given the variety of different, research supported interventions that have been carefully blended together into the Maths Pathway program, it is perhaps unsurprising that Maths Pathway has an overall effect size of 1.42 (compared to *Feedback* with 0.75, (Hattie, 2012)), resulting in it being measurably twice as effective as traditional classroom teaching (Maths Pathway, 2019). Whilst in itself, the Maths Pathway model cannot persuade the perennially disengaged to get on board and take control of their learning, it definitely empowers those students who already have, or who can build, that critical desire to succeed through their own effort, whatever their initial ability. To this end, the simple goal of most classroom teachers to make a difference to the learning of their students is thus made somewhat easier, knowing that those in your care who wish to succeed will be able to, liberated somewhat from the tyranny of the three-sizes-doesn't-actually-fit-all differentiated classroom model. For them Mathematics has fast become their favourite class. Moreover, knowing that one's capable students can self-direct frees up a greater degree of teacher time to focus on those who are struggling, evolving the primary role of the teacher from content provider, to growth coach, providing greater satisfaction that one can finally support all your students more equitably.

Experience has shown that with such one-on-one "growth coaching" that this model encourages, the ability to change a fixed to a growth mindset can be achieved. In one class, a student had very low self-esteem generally, but particularly in maths. Invariably in class, his use of the laptop was for anything other than maths and as such his growth rate in tests to that point had not exceeded 67%. With a little one-on-one, some personalised goal setting, and some changes to the aspects of the process he didn't like (his writing skills are poor, so we looked to minimise such), he managed to get a growth rate in one test of 300%. Anyone who achieves this score (or above) joins our 300 Club, which we reinforce as our highest accolade and each receives a 'special' pen. At the next test cycle, with minimum help, he achieved 300% again. And the two students he sits with also both achieved growth improvements of over 100%, and they also want to do better (and have approached me at recess for advice on how to do so). The focus on growth and having a numerical basis on which to support it, provides the student evidence of their success – it is not just the teacher's opinion that they are doing better, they can see it with their own eyes, and we celebrate the effort that creates these high growth figures in the classroom (figure 3). Whilst they might doubt the teacher, the data speaks directly. This change in mindset is also reflected in a positive change in classroom behaviour.



Figure 3. Student's achieving high growth rates prominently displayed on classroom board

This focus has also been greatly appreciated during parent-teacher interviews. Most parents have a fairly realistic understanding of where their child is – both from an aptitude and attitude perspective. For those whose students have struggled, being able to see that whilst behind compared to the expected level, their child's capability was growing, that knowledge gaps were being filled, and that growth rate was higher than the national average was hugely positive and affirming. Even more so when we were able to point out to some parents that their child had already achieved more than a year's worth of Maths growth in one semester (Figure 2 – columns 15, 18 & 20), even though their grades were often poor to average. Parents were actually far more interested in their child's growth rather than their grade, whatever their child's ability, recognising that such information reflected current effort and more accurately suggested future performance.

The importance of focusing on growth, as recommended in Focus 2019 (Department of Education, 2018) cannot be underestimated. Unlike capability measured in grades, which to a significant extent is based on past behaviour and thus cannot be easily altered, growth is measured on a student's current performance. As such, it provides a clearer reflection of the effort that they have put in at this time, and thus reflects who they are now, rather what they were for whatever reason. As teachers, we usually have little or no control on a student's capability prior to them joining your class, yet a general perception abounds that teaching ability is largely reflected by the number of high grades achieved in a class. Finding ways to more accurately measure growth, then using this information to both develop student mindset and more accurately and usefully report to parents on their child's aptitude and attitude development, would seem a highly worthwhile activity. The Maths Pathway program incorporates a number of features that both captures and shares growth data, and thus enables this change in emphasis. As such its value appears to be very strongly supported by a significant number of students and their parents as well as the growing community of teachers that use it, strongly underlined by the growth data that clearly displays an overall effectiveness that might otherwise be missed when focus is predominantly grade related.

References

- Department of Education WA. (2018). *Focus 2019: an initiative of the Director General's classroom first strategy*. Retrieved from: <http://det.wa.edu.au/policies/detcms/policy-planning-and-accountability/policies-framework/strategic-documents/focus-2019.en?cat-id=3457058>
- Dweck, C. (2006). *Mindset*. Random House, New York.
- Goss, P. & Hunter, J. (2015). *Targeted teaching. How better use of data can improve student learning*. Grattan Institute. Retrieved from: <https://grattan.edu.au/wp-content/uploads/2015/07/827-Targeted-Teaching.pdf>
- Hattie, J.A.C. (2012). *Visible learning for teachers: maximizing impact on learning*. Routledge, Abingdon.
- Hattie, J.A.C & Timperley, H. (2006). The power of feedback. *Review of Educational Research*, 77(1), 81-112.
- Maths Pathway (2019). *2019 impact report – reimagining the maths classroom*. South Melbourne, Victoria.
- Steenbergen-Hu, S., Makel, M. C., & Olszewski-Kubilius, P. (2016). What one hundred years of research says about the effects of ability grouping and acceleration on K–12 students' academic achievement: Findings of two second-order meta-analyses. *Review of Educational Research*, 86(4), 849–899. <https://doi.org/10.3102/0034654316675417>

The Importance of Positive Teacher-Student Relationships

Ryan Thornicroft

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When I reflect upon who the most impactful teachers were during my school journey, my highlight reel tends to include the ones that went the extra mile, taking the time to build and maintain real, authentic and lasting connections with me. I saw them as fair, passionate, warm and relatable human beings who wanted to help me achieve more, rather than distant adult authority figures simply telling me what to do. It is the former type of teachers that frequently change how students engage with the learning journey by actively building positive relationships, making class fun and inspiring us to push beyond what we think we are capable of (Baker, Grant, & Morlock, 2008).

This article aims to explore the critical importance of positive teacher-student relationships, the benefits it provides and explicit strategies on how we can further develop and maintain them.

The Clarkson Community High School Context

Research shows that students in low ICSEA (Index of Community Socio-Educational Advantage) schools may benefit even more than high ICSEA schools from positive teacher-student relationships, because of the pronounced risks associated with lower socioeconomic conditions. Schools in these areas often suffer from higher rates of school dropout, lower rates of tertiary applications, low self-efficacy and low self-confidence (Murray & Malmgren, 2005). Many factors can prevent these negative outcomes including a positive supporting relationship with an adult, most often a teacher (Murray & Malmgren, 2005). These students who develop a strong teacher-student relationship have higher academic achievement and have more positive social-emotional adjustment than their peers who do not (Alexander, Entwisle, & Horset, 1997; Cataldi, Laird & Kewalramani, 2009). As teachers in a school on the lower end of the ICSEA index it is imperative that we place critical value on building and maintaining these positive relationships with our students.

Hattie & Zierer's Mindframe 9 for Visible Learning

"I build relationships and trust so that learning can occur where it is safe to make mistakes and learn from others" (Hattie & Zierer, 2018, p128).

This mindframe explores the theory that learning is built upon the foundational pillars of positive relationships. They in essence form a resource to be spent in difficult situations for both student and teacher alike. Hattie & Zierer (2018) assert that effective instruction is ultimately built upon relationship building and the more safe, positive and trusting these relationships are the more the child will learn. Unpacking this mindframe further, Hattie & Zierer describe four primary factors impacting visible learning and their overall affect size:

- Teacher expectations (0,43)
- Teacher student relationship (0,72)
- Reducing Anxiety (0,40)
- Teacher Credibility (0,90)

As clearly seen teacher-student relationship represents one of the most impactful factors to effective visible learning with an effect size of 0,72. The research clearly shows that positive teacher student relationship is unequivocally essential for accelerating student learning. But what exactly does positive teacher-student relationship look like? Hattie & Zierer clearly illustrate the most effective relational teaching style by directly paralleling effective parenting styles (Figure 1). They assert that an authoritative teaching style whereby the teacher has high levels of closeness and control, creates the greatest potential for effective learning (Figure 1). All experienced parents know full well the perils of being too authoritarian or too permissive but do we as educators? Great teachers demonstrate an effective authoritative relational style create a fair, predictable and therefore safe environment where students are invited to take ownership of their learning journey. This certainly resonates with my own school experience where my best teachers clearly exhibited strong control of their classes as well as possessing the same presence of warmth and positivity described by Hamre & Pianta (2001). It is upon this platform that all great teachers build and continually maintain to allow an effective learning journey for all students both academically and socially.

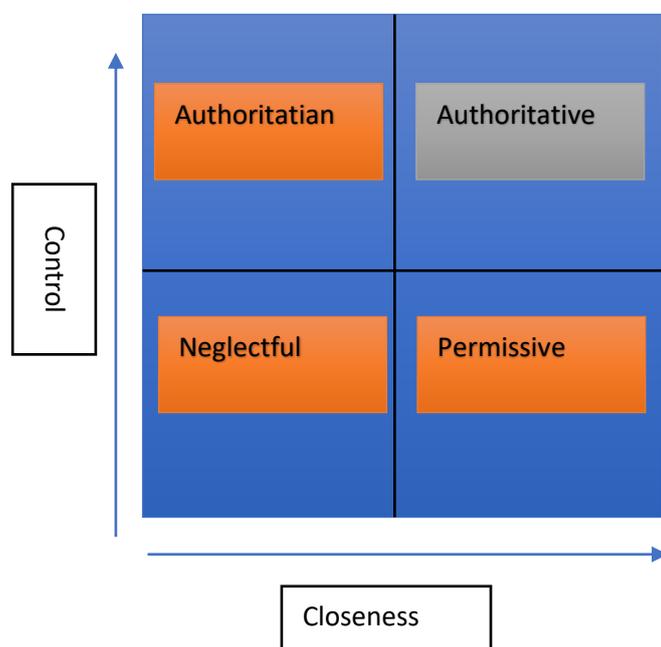


Figure 1: Parenting styles

The Student Engagement Framework

The Commissioner for Children and Young People WA developed The Student Engagement Framework in response to the *Speaking Out About School & Learning; The Views of WA Children and Young People* on factors that support their engagement in school and learning Jan 2018. The framework built on upon the evidence provided by 1,812 West Australian schools students showed the following:

- Teachers who have a genuine interest in student well-being and futures is a primary foundational factor in the level of student engagement in school (Figure 2).

The Student Engagement Framework

These nine factors and their inter-relatedness can be described with the following model:

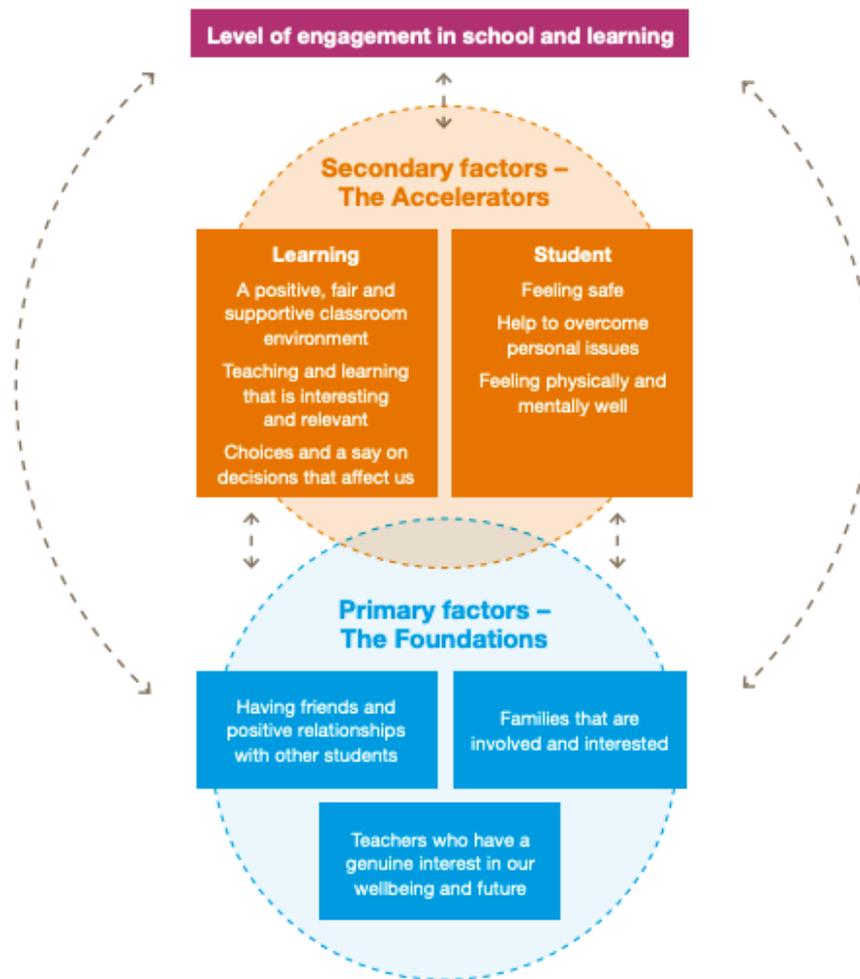


Figure 2: The School Engagement Framework (Commissioner for Young People and Children WA, 2018, p. 9)

- Teachers strongly influence students' experiences of school and learning.
- Students preferred teachers who worked to build relationships with students.
- Respectful, trusting relationships where teachers took an interest in students and demonstrated understanding of their personal situations and needs made them more comfortable and thus likely to engage with learning.
- Teachers who were critical, dismissive or in conflict with students negatively affected student motivation, level of comfort, perception of available support.
- The importance of mutual respect and teachers treating them more like adults.
- Students who have positive relationships with their teachers are more likely to like school and feel like they are a part of the school. They are also more value attendance and likely to achieve higher academic results (Figure 3)

Graph 6: Selected engagement indicators for Year 7 to Year 12 students who usually get along with teachers and feel that teachers care a lot or who get along with teachers sometimes and feel that teachers care some

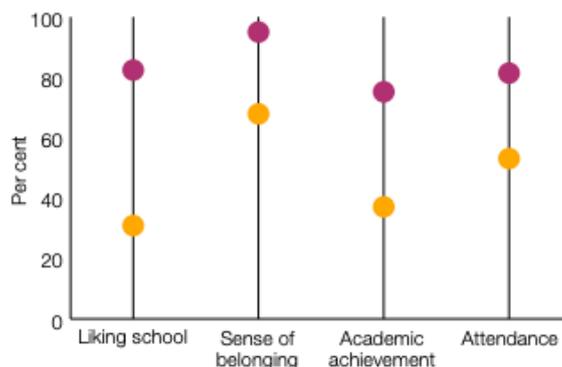


Figure 3: Selected engagement indicators for student with positive teacher relationships (Commissioner for Young People and Children WA, 2018, p. 15)

The report also collated the following improvement suggestions from the students:

- More respectful and caring school staff who show genuine interest in students and their wellbeing. This included teachers taking the time to have conversations with student about more than work
- More school staff to work in ways that create the optimal environments for engagement with learning. That is, school staff who were enthusiastic about teaching, employed engaging and effective pedagogy, worked to understand students, were relaxed, approachable, consistent and provided encouragement.
- Initiatives organised by schools that provide opportunities to further develop relationships with school staff such as (time to talk, introductory lessons, morning teas, collaborative activities).
- Students to demonstrate respect towards school staff

Strategies to develop Positive Student-Teacher relationships

The reality is that some teachers are inherently more natural at building positive relationships with students than others. However, all teachers can overcome these potential handicaps by intentionally implementing the following simple strategies into their classrooms and beyond.

1. Expect Greatness

Invitational Education Theory seeks to “provide a means of intentionally summoning people to realise their relatively boundless potential in all areas of worthwhile human endeavor” (Purkey & Novak, 2015). This is achieved at Clarkson Community High School by embedding the five ‘Elements of focus which detail what it means to have an invitational approach towards students. The elements are intentionality, care, optimism, respect and trust – collectively abbreviated as I-CORT. Expecting greatness as a strategy lends itself to the fundamental mindset of optimism for our students. This strategy begins before we even set foot into the classroom where we must intentionally equip ourselves with high expectations for all. Research shows just how important optimism is in the classroom environment with the effect size of a sizable 0.43 (Hattie, 2008). It has also been shown that students shape their own educational expectations from their perceptions of their teachers’ expectations (Muller, Katz & Dance, 1999). Simply put, students who perceive that their teachers have high expectations of their academic achievement are more motivated to try to meet those expectations than their peers who perceive low expectations from their teachers (Muller et al., 1999). As teachers we need to have an optimistic expectation of even the most difficult of students.

2. Teach with Passion

Passion and apathy in teachers are both as contagious as each other and are directly caught by students. If we as teachers are not passionate in the classroom how can we expect our students to be? If we are passionate students will be more likely to buy in thus translating to increased learning.

3. Provide Structure and Routine

The vast majority of students respond positively to having structure and routine in their classroom (Meador & Derrick, 2019). Students feel safe which in turn allows them to take the necessary risks involved in the learning journey. Teachers who lack structure and routine often lose valuable instructional time as well as struggling to gain the respect of their students. It is essential that teachers set the tone early with clear concise expectations and class procedures. A practical example I use EVERY lesson is having students get out and show a piece of stationery, ensure they are in correct uniform while they wait in line. Furthermore, I intentionally wait for absolute silence before opening the door. Make no mistake about it, when I introduce this routine to new students there is resistance, but as I “stick to my guns” and stay consistent with my expectations, the students eventually lock into the routine like clockwork. The outcome of providing this sort of structure and routine in this particular example is a class that comes in calm, ready to work and reminded of my authority.

4. Factor Student Interest

All students no matter how they appear on the outside are passionate about something. It is worth its weight in gold to find out what each of your students are interested in so more effectively adapt content and delivery to target them. Student surveys, casual conversations and parent contact are great ways of discovering more about your students. Teachers who take the time to do this will see increased participation, higher involvement and an overall increase in learning. Students will also in turn appreciate the extra effort to include their interests into the learning journey.

5. Make Learning Fun

The Australian teaching standard 3.4 “Select and use resources” highlights the requirement for proficient teachers to *Select and/or create a range of resources, including ICT, that engage students in their learning* (Australian Institute for Teaching and School Leadership, 2011). By using a range of sources teachers can make learning an enjoyable experience. Nobody wants to spend time learning in an environment where speech heavy lecturing and ROTE learning are the norms. Students, especially younger ones, love creative, hands on, engaging lessons that grab their attention and allow them to take ownership of the learning process. The unfortunate reality however is that providing these sorts of lessons requires work. But like all industries and furthermore life, what you put in is what you get out!

6. You reap what you sow

Going the extra mile is not a requirement in any profession. However, without doing it we cannot expect the visible results we all desire. An AFL player does not win a brownlow medal without going above and beyond his clubs training program. A real estate doesn't dominate a region without making the extra call or hand delivering a hamper with the house keys. Simply put people who go the extra mile are always eventually rewarded with higher results. Teachers are not exempt from this life principal. Whether it is providing tutoring before school, creating additional work packets, celebrating birthdays, frequent parental calls or after school rehearsals. For me personally I can unequivocally say that the relative success of the music program at Clarkson Community High School would not been achieved if I had not invested hundreds of often unseen hours of my spare time into what I am passionate about. Not only do the students benefit from my hard work, but I benefit too. Research has shown that relationships with students were the most important source of enjoyment and motivation for teachers themselves (Hargreaves 2000).

7. Show an interest in their lives outside of school

We only see these students 6 hours a day, 5 days a week and 40 weeks of the year. However, believe it or not, our students have lives outside of our classrooms. It is critically important to pay genuine interest in what they do outside of school. Students will see that you value them as more than just a means to a paycheck but rather a valuable human being regardless of their academic or behavioural performance. Take an interest in their interests even if you do not share the same passion. Attend sporting games or extracurricular activities to show your support. An excellent example of this at Clarkson Community High School was seeing numerous teachers giving up their evening this year to support students performing at the annual Clarkson Has Talent event.

8. Treat them with respect

Your students will never respect you if you do not respect them. You should never yell, use sarcasm, single a student out, or attempt to embarrass them. Those things will lead to a loss of respect from the entire class. Teachers should handle situations professionally. You should deal with problems individually, in a respectful, yet direct and authoritative manner (Hattie & Zierer, 2018). Teachers must treat each student the same. You cannot play favourites. The same set of rules must apply to all students. It is also vital that a teacher is fair and consistent when dealing with students.

Conclusion & Limitations

The research of older students' relationships with teachers has clearly shown that students improve both academically and socially from positive teacher-student relationships (Alexander et al., 1997; Cataldi et al., 2009; Hughes et al., 1999; Midgley et al., 1989; Ryan et al., 1994; Wentzel, 2003). However, much of this research is dated. Due to the ever-changing nature of western educational systems and the increasingly diverse student body, more current studies are needed to look at the effects of teacher-student relationships for this changing population. It is particularly pertinent to learn more about teacher-student relationships for low-income students to decrease high school dropout rates and improve students' social-emotional development. Conducting research on the relationship between high school students and teachers may be essential in improving the outcomes of low-income high school students and can potentially inform future interventions to help older students perform better both academically and socially.

Through an intentional framework of genuine care for students, optimism that all can achieve, mutual respect and trust, we as educators can further develop the foundationally critical role positive student-teacher relationship has in the outcomes of both student and teacher alike.

References:

- Alexander, K. L., Entwisle, D. R., & Horsey, C. S. (1997). From first grade forward: Early foundations of high school dropout. *Sociology of Education*, 87-107.
- Australian Institute for Teaching and School Leadership. (2011). *Australian Professional Standards for Teachers*. Retrieved from: https://www.aitsl.edu.au/docs/default-source/national-policy-framework/australian-professional-standards-for-teachers.pdf?sfvrsn=5800f33c_64
- Baker, J. Grant, S., & Morlock, L. (2008). The teacher–student relationship as a developmental context for children with internalizing or externalizing behaviour problems. *School Psychology Quarterly*, 23(1), 3-15.
- Cataldi, E. F., Laird, J., & Kewalramani, A. (2009). *High school dropout and completion rates in the United States: 2007* (NCES 2009-064). Washington, DC: National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education.

- Commissioner for Children and Young People (2018). *Speaking out about school and learning: The views of WA children and young people on factors that support their engagement in school and learning*. Commissioner for Children and Young People WA, Perth, Australia.
- Hamre, B. K., & Pianta, R. C. (2001). Early teacher–child relationships and the trajectory of children’s school outcomes through eighth grade. *Child Development, 72*(2), 625-638.
- Hargreaves, A. (2000). Mixed emotions: Teachers’ perceptions of their interactions with students. *Teaching and Teacher Education, 16*, 811–826.
- Hattie, J. and Zierer, K. (2018). *10 mindframes for visible learning*. Echo Point Books & Media, LLC.
- Hughes, J. N., Cavell, T. A., & Willson, V. (2001). Further support for the developmental significance of the quality of the teacher–student relationship. *Journal of School Psychology, 39*(4), 289-301.
- Meador, D. (2019, July 5). *Strategies for teachers to develop positive relationships with students*. Retrieved from: thoughtco.com/develop-positive-relationships-with-students-3194339.
- Midgley, C., Feldlaufer, H., & Eccles, J. S. (1989). Student/teacher relations and attitudes toward mathematics before and after the transition to junior high school. *Child Development, 60*(4), 981-992.
- Murray, C., & Malmgren, K. (2005). Implementing a teacher–student relationship program in a high-poverty urban school: Effects on social, emotional, and academic adjustment and lessons learned. *Journal of School Psychology, 43*(2), 137-152.
- Muller, C., Katz, S. R., & Dance, L. J. (1999). Investing in teaching and learning dynamics of the teacher-student relationship from each actor’s perspective. *Urban Education, 34*(3), 292-337.
- Purkey, W.W. & Novak, J.M. (2015). An Introduction to Invitational Theory. *Journal of Invitational Theory and Practice, vol. 1, no. 1, pp. 5–15*.
- Ryan, R. M., Stiller, J. D., & Lynch, J. H. (1994). Representations of relationships to teachers, parents, and friends as predictors of academic motivation and self-esteem. *The Journal of Early Adolescence, 14*(2), 226-249.

A Walk in the Cloud: The implications of Cognitive Load Theory on student learning

Evelyn Kiddie

Evelyn Kiddie joined Clarkson Community High School as an English teacher in 2007 and has moved on to teach HASS as well. Evelyn is a life-long learner, a lover of language and knowledge. She works to invite students to develop, or discover, the same sense of wonder and enquiry in their lives.



According to the Boston based company Nasuni, the 'cloud' - a metaphor for capacious storage on the global internet - now contains over 1 Exabyte, that is, 1 billion Gigabytes of data (Callaham, 2013).

However, the giant array of computers handling the world-wide load has a rival, in terms of storage capacity versus size. Researchers at the Salk Institute for Biological Studies in La Jolla, California have calculated that the brain could store a quadrillion bytes of information (Ghose, 2016). One expert commented that, "Our new measurements of the brain's memory capacity increase conservative estimates by a factor of 10" (Ghose, 2016, para. 3). Not only that, while a computer of that capacity would need the equivalent of "a nuclear power station" to run it, the human brain's humungous 'store-cupboard' uses, "just enough power to run a dim light bulb" (Ghose, 2016, para. 4). This is an amazing feat for an object that weighs an average 1.5 kilograms. So much capacity and so little time! Time is of the essence when it comes to maximising this superb storage system. Masaru Ibuka, author of the book *Kindergarten is too late* wrote that, "The most significant human learning occurs from birth to 3 years old" (2018, p.1).

This makes sense because of the amazing expansion, in terms of the brain's synapses, that takes place in the first three years of life. It is evident that parents have a primary role in founding their child's capacity for future learning.

Learning and memory are hand and glove; what real learning takes place that isn't remembered? So, for educators, the way the brain takes in and stores information is crucial knowledge; based on such understanding teachers can intentionally craft their lessons to boost student memory. Neuroscience has revealed the complex system of encoding (taking in), storage, and retrieval of knowledge. Like a chest of

drawers, information can be placed in the correct drawer and retrieved by opening the draw and taking it out. In ideal circumstances, this is how the brain works, but often, for a number of reasons, researchers of Cognitive Load Theory have noted that, increasingly, students' working memory is being compromised by various factors, and "When working memory is overloaded, learning is minimal" (Hattie & Clarke, 2018, p. 84). One of these factors is stress.

Stress, considered a normal part of human life, is defined by the Cleveland Clinic as "The body's reaction to any change that requires an adjustment or response" (Cleveland Clinic, 2015, Para.1). The environment, the mind and body can create stressors that may cause physical, mental, and emotional responses.

Stressed children are on the increase, and, according to researchers, "... nearly 70% of primary school children report symptoms of stress such as worries, anxiety or sadness" (Vogel & Schwabe, 2016, p.6). Similarly, a survey of upwards of 135,000 young people, conducted by the Australian Council for Educational Research, revealed that, "Australian students are increasingly stressed, worry more and have less confidence in their abilities than 15 years ago..." (Urban, 2018, p. 1). Educational psychologist, Michael Bernard, who was involved in the study, estimated that at least 17% of students compromised well-being was, "Typically associated with being disconnected from family or peers, having negative emotions, feelings and behaviours, and lacking in social values and skills" (Urban, 2018, p. 1). Educators in classrooms find themselves, not only teaching curriculum, but dealing with negative and disruptive behaviours which impact on classroom learning. Stressful classrooms will have an impact on student learning and memory, but not all stress is bad.

Researchers, studying the effect of stress on memory, found that the effects of stress are “complex ...depending on the stage of learning, both enhancing and impairing...” (Vogel & Schwabe, 2016, p.1). Positive stress, induced by the cognitive demand of the task at the time of learning, is found to assist memory, but negative stress generated by disputes at home, or in the playground, long before learning, is likely to impair memory retrieval during an exam (Vogel & Schwabe, 2016). On a positive note, researchers have also discovered that educators can do much to ameliorate the effects of negative stress on student memory and cognition. They have found, for example, that, “Emotional material is typically better remembered than neutral material” (Vogel & Schwabe, 2016, p. 7). Teachers, therefore, need to appeal to the heart – the seat of emotions – in their students, which will enhance the encoding of information. Two suggested ways are the value of *explicit positive verbal reinforcement* of students in class; also, the choosing of video clips that make *explicit links* to learning and students’ lives, boosting memory by creating an *emotional context*. Such contexts serve as a *retrieval cue*, sparing students from the impairing effects of stress. Other ways to alleviate stress in the schoolroom is to provide students with cues, rather than expecting students to do a *cold-recall* of the facts during formative assessments or quizzes. In preparation for formal testing, such as NAPLAN and OLNA, it is advised that schools alleviate student stress to the extent possible, as moderate to high levels of stress before exams are considered likely to hinder memory retrieval. Instead, giving students more attention, scaffolding them with practice exams and training students in stress reduction techniques (Vogel & Schwabe, 2016, p. 7) will aid students to cope better.

Teachers and schools can do much to lighten cognitive overload, brought about by negative stress, by creating a school-wide atmosphere that fosters positive emotions across the microcosm. Another powerful way to enhance student memory and alleviate working memory overload is fundamentally connected to timing.

Paul Pimsleur, born in New York in 1927, created his own powerful method for teaching foreign language vocabulary, which he named, *Graduated Interval Recall*. He taught his students his *rule of five*; training them to revise their language vocabularies after one

hour, one day, one week, one month and then extending it to three months (Foer, 2011).

Today, this technique is referred to as *spaced or distributed practice*: “Spaced review or practice enhances diverse forms of learning, including memory...and has tremendous potential to improve educational outcomes” (Kang, 2016, para.1).

Adding to this, “*Practice spaced out over time in short sessions is much more successful for learning than massed practice all at one time*” (Hattie & Clarke, 2018 p. 87). Strong links can be made not just by spaced practice, but by gradually adding everything learned so far into current learning; showing that the building of “indelible” memories is a continual, intentional, process of rehearsal and revision which lightens the cognitive load and produces a rich tapestry of interconnected ideas. A fundamental prerequisite to this cognitive process is the ability to pay attention.

According to Professor David Strayer, quoted in the New York Times:

“Attention is the holy grail...everything that you’re conscious of, everything you let in, everything you remember and you forget, depends on it” (Richtel, 2010, para.9-10).

However, people find it difficult to attend to just one thing at a time because of the tidal wave of information flooding into people’s minds via the array of devices that have become a *phantom limb* for many (Wilmer, Sherman & Chein, 2017). This extraordinary attachment to one’s devices is increasingly problematic in the classroom; at the very coalface of learning. In terms of longitudinal studies of its effects, it’s all very new. However, some truths have been extracted by researchers, such as the fact that: “The current generation of children and adolescents are developing increasingly shorter attention spans due to ... smartphone technology and use onset at younger ages.” (Wilmer, Sherman & Chein, 2017). Attention, a delicate and ephemeral prerequisite for encoding information, is a risk from both endogenous and exogenous sources.

“Endogenous interruptions occur when the user’s own thoughts drift toward a smartphone-related activity,” leading to a strong urge to interact with the device. Many students cannot, or do not wish to, resist the temptation to take out their device to which they give their undivided attention. The

learning cycle is broken; attention has shifted and this will undoubtedly prove, “detrimental...to primary task completion” (Wilmer, Sherman & Chein, 2017, p. 4). On the other hand, *exogenous* interruptions are caused by an “environmental cue” that grabs the individual’s attention, such as hearing their phone notification, or someone else’s. Even if the student is strong enough to resist the alert from the device, researchers have found that, “...exposure to smartphone notifications significantly decreased performance on a concurrent attention-based task...” (Wilmer, Sherman & Chein, 2017, p. 4). The brain is now in a heightened phase of interest, or even anxiety, about who the message is from and what the news may be; emotion will override the student’s focus on the work-at-hand. The emotional attachment to devices, including feelings of anxiety when deprived of one’s phone has been noted by researchers (Cheever, Rosen, Carrier & Chavez, 2014) making the removal of such devices a confrontational

issue within the classroom. The paradox is that while devices become more omnipresent in our lives, the presence and use of such is increasingly being linked to poor academic performance. Clearly, modern technology, used at the wrong time, is adding to students’ cognitive load.

On a brighter note, educators, who are fully aware of the brain’s potential for knowledge-storage and retrieval, continue to work at circumventing these real threats to student learning. The fostering of a positive school-wide atmosphere that filters through to emotionally connected teaching, the giving of genuine praise, scaffolding formal tests by thorough preparation and, finally, boosting the embedding of ideas by spaced practice, are key ways to lighten the cognitive load of stressed students. An intriguing object, the smallish bundle of “little grey cells” that runs on a puny 20 watts, is truly the cleverest ‘cloud’ of them all.

References:

- Callaham, J. (2013, February 19). Research firm: Over 1 exabyte of data is now stored in the cloud. [Blog post]. Retrieved from <https://www.neowin.net/news/research-firm-over-1-exabyte-of-data-is-now-stored-in-the-cloud/>
- Cheever, N.A., Rosen, L. D., Carrier, L.M. & Chavez, A. (2014). Out of sight is not out of mind: The impact of restricting wireless mobile device use on anxiety levels among low, moderate and high users. *Computers in Human Behaviour*, 37, 290-297.
- Foer, J (2011, January 5). The Pimsleur Language Method. – Art of Memory Blog. Retrieved from: <https://artofmemory.com/blog/the-pimsleur-language-method-1173.html>
- Ghose, T. (2016, February 18). The human brain’s memory could store the entire internet. [Blog post]. Retrieved from: <https://www.livescience.com/53751-brain-could-store-internet.html>
- Hattie, J., & Clarke, S. (2018). *Visible learning: Feedback*. Abingdon, UK: Routledge.
- Ibuka, M. (1977). *Kindergarten is too late*. London: Souvenir Press.
- Kang, S. H. (2016). Spaced repetition promotes efficient and effective learning: Policy implications for instruction. *Policy Insights from the Behavioral and Brain Sciences*, 3(1), 12-19. doi:10.1177/2372732215624708
- Richtel, M. (2010, August 15). Outdoors and out of reach, studying the brain. *The New York Times*. Retrieved from: <https://www.nytimes.com/2010/08/16/technology/16brain.html>
- Urban, R. (2018, June 15). Students’ stress level up and confidence down. *The Australian*. Retrieved from: <https://www.theaustralian.com.au/nation/education/students-stress-levels-up-and-confidence-down/news-story/7490651538721ba426314685f56ec3c1>
- Vogel, S., & Schwabe, L. (2016, June 26). Learning and memory under stress: implications for the classroom. *npj Science of Learning*. Volume1, Article number: 16011 Retrieved from: <https://www.nature.com/articles/npjscilearn201611>

Wilmer, H. H., & Sherman, Lauren E., & Chein, J.M. (2017, April 25). Smartphones and cognition: A review of research exploring the links between mobile technology habits and cognitive functioning. *Frontiers in Psychology*. Retrieved from: <https://www.frontiersin.org/articles/10.3389/fpsyg.2017.00605/full>

Student Voice at CCHS

Jasmita Jeshani

Jasmita Jeshani joined Clarkson Community High School January 2018 as a Media Arts and Visual Arts teacher, teaching a range of lower school and upper school in Media and Visual Arts. Since 2018 Jasmita has worked with the Student Council to represent the student voice, Professional Learning Team Committee to implement explicit teaching at Clarkson Community High School. Prior to coming to Clarkson, Jasmita worked at Kalgoorlie-Boulder Community High School, where she defined her philosophy on teaching: All students are entitled to the same education regardless of the demographic, ability, behaviour and cultural context.



Introduction

Student voice is the most integral part of the day to day running of a school because it allows them to become masters of their education. Clarkson Community High School currently has 13 student councillors with two representatives from each year group. They represent the voice of the student body at Clarkson. Over the last two years, the student councillors have participated in a range of leadership activities that has helped encourage the student voice.

What is the Teach the Teacher Program

“Teach the Teacher is a student-led professional development program for teachers and school staff.” (Victorian Students Representative Council, 2019). This program originated in Victorian Schools originally designed by Edison Ponari and Denara Amat the original members of VicSRC (Victorian Student Representative Council) Student Executive 2011-2012.

The teach the teacher program is an example of the students voice, the aim of the program is to “create a positive whole-school community through student-led conversation. This recognised the student voice allowing them to have a greater say in their education.

Teach the Teacher Program at Clarkson Community High School

Teach the Teacher means to me:

- ...Speak freely, teachers and students, about ways we can support ways we can support each other
Tyson Mora
- ...Your voice and your ideas matter when we work together
Georgia Lovette Yr 9
- ...A helpful program for students to work with their teachers for support
Luke Graham Yr 7
- ...Used to help teach and maintain healthy relationships between teachers and students
Soniya Sewpal Yr 8
- ...Encouraging student voice, to have an input in their learning – Kaiza Metuariki Yr 11
- ...Giving students a say in their learning
-Jhameika Bradford Yr 11
- ...Allows students and teachers to create an authentic relationship and to feel comfortable around each other
Vivian Nou Yr 11
- ...Build a good foundation for open communication and feedbacks
-Jaimee Fairbairn Yr 7
- ...Dedicated to helping the bond between students and teachers for educational purposes
Wyette Coxy Yr 8
- ...A relationship built between student and teacher to acknowledge their skills and to make learning better
Thu Thay Paw Yr 10

Figure 1

In 2018, Robin Ferris, the student councillors and I adapted the Teach the Teacher program. The goal of the program was to improve the student -teacher relationships and to build a better foundation for open communication centred on feedback. “Children and young people are the experts on their own experiences” (Bourke & Loveridge, 2018). The student councillor agreed that conducting a survey to hear what the students about their relationship with their teachers was the best way to go. Prior to creating the survey, they brainstormed survey questions keeping the following in mind: the different levels of student’s abilities, if the language they used is student friendly and if the question will give qualitative and quantitative results. The survey was created by the students for the students “hearing and incorporating their views delivers better and more robust decisions” (Bourke & Loveridge, 2018). In order to promote the survey, the student councillors produced a short video explaining what the teach the teacher program was and attended assemblies to encourage the student complete the survey.

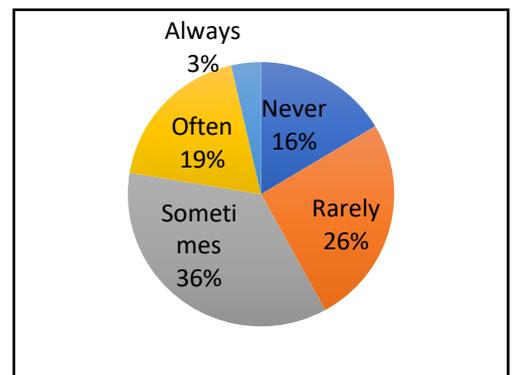
Survey Results

At the completion of the survey the data was analysed by the student councillors. They broke down each question and identified the focus and below was the outcome of the data summary. I’d also like to add a special thank you to Adam Inder and Robin Ferris for their continued support during this process.

1. Do your teachers ask for your feedback?

Focus: The focus of this question was to identify if teachers are asking students for feedback on their learning and their teaching practices.

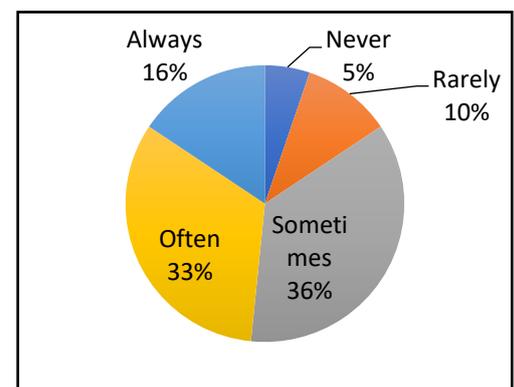
Student Council summary: The data shows 36% of students think that their teachers don’t ask for feedback, whereas 3% of teachers ask for feedback which is surprising in class. The results aren’t bad, but they let us know that we need work together with both teachers and students via stronger communication skills around feedback within the classroom.



2. Are your teachers approachable?

Focus: The aim of this question was to identify if students found teachers at Clarkson Community High School are approachable? Do students feel comfortable to approach their teachers to ask for help?

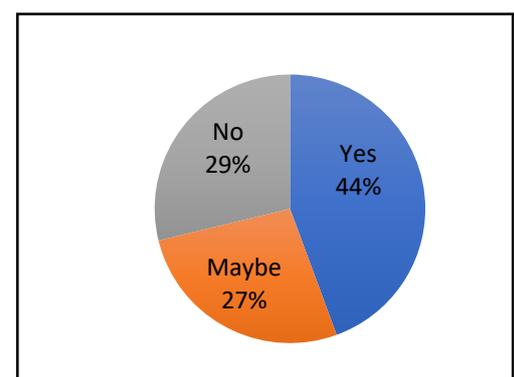
Students Council Summary: This data tells us that there are only 16% of teachers that are always approachable, whereas over 50% of students believe that teachers are sometimes or often approachable. But in this data, we must also consider that even though the sometimes and often takes up a largest percentage of our data, compared to the rarely and never, we say these results are good. The data indicates that over half the students do agree that teachers are mostly approachable.



3. Does your relationship with your teacher affect your ability to learn?

Focus: The aim of this question is to understand if the students believed if the relationship with their teacher had any effect on their learning.

Student Council Summary: The data tells us that less than half of the students that did the survey said “Yes, their relationships with their teachers does affect their ability to learn.” More than quarter of them said No and the rest said Maybe. We believe that the results can be better, but

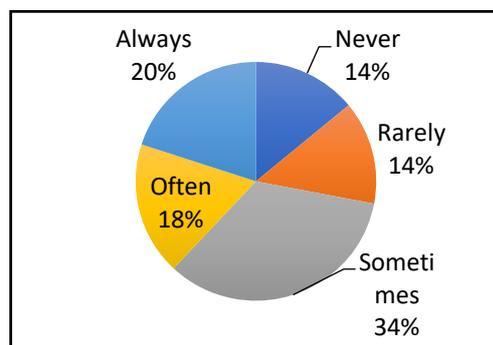


it is concerning that the students don't know or think their relationships with their teachers are important. To improve the data, it is important that we encourage students and teachers to communicate and understand how our relationships affect our learning in class. But also, to try and maintain a mutual relationship of respect between students and staff.

4. Do you think your opinions matter to the teacher?

Focus: The aim of this question was to understand if the students voice was being heard in the classroom and if the students felt encouraged to express their opinions.

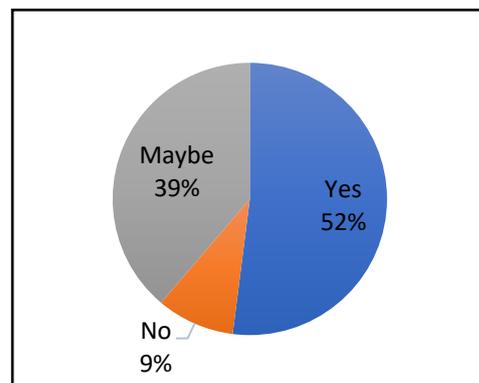
Student Council Summary: The data shows that 14% of students believed that their opinions didn't matter to the teacher. These results are bad because the "Always" and "Often" are too low. Our opinions should always matter and the "Never" percentage should be lower. To improve this data, we must build a better teacher-student relationship and increase the teacher-student interaction.



5. Do you feel your teachers genuinely want to genuinely help you learn?

Focus: The aim of this question was to understand if the students believed that their teacher genuinely wanted to help them learn in the classroom.

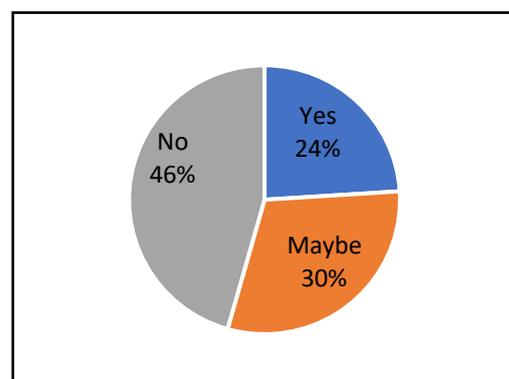
Student Council Summary: Over 50% of students feel that their teachers want to help them learn. The major thing that stood out was the surprise that 39% of students feel that students aren't there to help them learn. These results are good but can definitely be improved because more than half of the students felt that their teachers wanted to help them but a major part of them felt that they couldn't. Communication is the key to a better bond, so we should incorporate this into their relationships so kids feel more comfortable and confident; if you aren't comfortable and confident then you can't perform to the best of their ability. An extra idea could be that older students (Year 12s) could help students in younger levels so they have someone who they relate to.



6. Can you express yourself freely to your teachers?

Focus: The aim of this question was to understand if the students believed that their teachers would listen to them and take into consideration their concerns and issues.

Student Council Summary: The data shows almost half of the students at the school don't feel like they can express themselves freely to their teachers, and only a quarter can confidently say yes. We think the results are bad because we want our students to feel more comfortable in the classroom, which create a more nurturing environment, and this leads to students wanting to learn. Data can be improved if we create activities that will improve the teacher student relationship.



Drawing from the survey results, clear areas of potential improvement emerged:

- Strengthening relationships between students and teachers;
- Better communication to help students feel comfortable and confident in the classroom; and
- Teacher involvement which demonstrates they actually care about student learning.

The data was then shared with the staff members at Clarkson Community High School and using our favourite Disney characters as teams, each team was given a discussion question. For example: Feedback. Do you ask for it? How? In what format? Is this visible and explicit? How do we share it back with the class? See figure 2. The staff lead discussion yielded similar results to the student which will help lead us forward with shared objectives.

- Maui - Feedback. Do you ask for it? How? In what format? Is this visible and explicit? How do we share it back with the class?
- Pinocchio - Approachability. What do you do to be "approachable"? How do you assess this? What techniques have you built to develop your approachability?
- Aladdin - Opinions matter. How do you gather student opinion? How do you show that it matters to you?
- Snow White – Helping them learn. How do you show students you are helping them learn? What could you do?
- Rapunzel – Building relationships. How do you build relationships with students? What techniques are most effective?
- Cinderella – Improving the data. What information is missing from the survey? How could we improve it?

Figure 2

What are the next steps?

Dr Steven Laing came on board in 2019, and identified the below as the next steps:

- How can we improve **our** results?
- How can we improve the quality of the collected data to help us improve our behaviours and hence **our** results?

The student councillors believed that the survey can be improved by students providing examples of a positive and improvable behaviour. Where behaviour is positive, exemplar teachers will be identified, encouraging sharing of practice; where behaviour is improvable, this will not be identifiable to any particular teacher. It is important that both students and teachers recognise that this feedback is to enable improvement, not blame. This will give them content for providing staff members a student-led professional development for staff at Clarkson CHS.

Conclusion

The teach the teacher program is intended to improve the discourse and encourage students to take greater ownership of their learning. The program allowed the teachers to "investigate what *our students* considered important, as opposed to what we as *teacher educators* held as important and necessary..." (Wilks, Snow, Lasczik, & Bowling, 2019) ties back to the idea that students are the experts of their learning. Continuing the Student Voice program at Clarkson CHS should improve the students learning experience and allow them to become more independent learners.

References:

Bourke, R., & Loveridge, J. (2018). *Radical collegiality through student voice*. Springer.

Victorian Students Representative Council, V. (2019). *Teach the Teacher - About*. Retrieved from: <http://teachtheteacher.org.au/about/>

Wilks, J. L., Snow, M., Lasczik, L., & Bowling, A. (2019). Working towards 'Doing it better': Seeking the student voice in teacher education. *Australian Journal of Teacher Education*, 44(1).

Invitational education and student suspensions at Clarkson Community High School

Pat Hughes

Pat is a Senior School Psychologist, based at Clarkson Community High School. She has been a School Psychologist since the 1990s and particularly enjoys working with secondary students. Prior to this, she was a teacher for many years and has taught from kindergarten to tertiary levels in Western Australia, Queensland and New South Wales. Her special area of interest is learning difficulties, and she welcomes contact from parents as well as students.



Clarkson Community High School students need and receive a lot of care. A school cannot care directly for students, but it can work towards establishing an environment in which caring-for, can flourish (Noddings, 2013).

Clarkson Community High School bases its educational philosophy on The Fundamentals of Invitational Education (Purkey & Novak, 2014). Invitational education is based on the concepts of trust, respect, optimism and care. Teaching strategies are based on Visible Learning for Teachers (Hattie, 2012) and 10 Mindframes for Visible Learning (Hattie & Zierer, 2014). These mindframes may be split into three groups: impact; change and challenge; and learning focus. Thus, care is an important part of all aspects of a student's education at Clarkson Community High School, including the suspension process.

In Fundamentals of Invitational Education, Purkey & Novak (2014, p.6) imagine a truly inviting school and quote from the poem *What is a Student?* These lines from the poem illustrate the importance of care for each and every student:

We are not doing a favour by serving the student
The student is doing us a favour by giving us the
opportunity to do so...
It is our job to handle each student in a manner
which is beneficial to the student and ourselves.

Clarkson Community High School is a non-independent government secondary school, located in the northern outer coastal suburbs of Perth, Western Australia and caters for over four hundred students. The school's student intake is affected particularly by three neighbouring schools. School intake boundaries mean that the neighbouring schools have closer access to students living in the coastal suburbs with higher median house prices and higher median household incomes than those who live close to Clarkson Community High School. Each neighbouring school is newer and has a higher index of socio-educational

advantage (ICSEA) than Clarkson Community High School. The ICSEA figures for Clarkson Community High School in 2018 was 9.46 and in 2019 is Band 9, 9.42. Many of the students enter here at literacy and numeracy standards which are significantly below minimum attainment. There are also approximately 11% of indigenous students and approximately 11% of students from a non-English speaking background (Clarkson Community High School, 2017).

Socio-economic status has important implications for a child's academic achievement (Bradley & Corwyn, 2002) The pathway of causes of socio-economic status influence academic achievement, the home learning environment, parenting, health, teaching methods and neighbourhood conditions. A background of trauma also has an impact on brain development and functioning, memory, emotional development, the capacity to form meaningful relationships with others, physiology, social skills and mental health (Perkins, 2015).

As Clarkson Community High School is not an Independent Public School (IPS), staffing can also be problematic. This may lead to a lack of teacher continuity which also impacts upon student learning (Howard, 2017).

Parental expectations were the best predictor of academic achievement in a meta-analysis conducted by Jeynes (2007). If parents have few economic resources and their lives are stressed due to other factors linked to their health, socio-economic or historical constraints, their abilities to provide opportunities for their children are likely to be constrained as well.

In Invitational Education, care is the ongoing desire to link personal means with worthwhile societal ends. Careful planning and being oriented to positive possibilities help bring this about. Thus, school policies should be fairly applied and reasonably enforced. Policies need to reflect optimism, trust, respect, care

and intentionality for all students. The suspension process is carried out with care for students at Clarkson Community High School. The process sits under the umbrella of the School Wide Positive Behaviour System (SWPBS) which reassures staff that appropriate behaviours can be effectively taught to all students. The SWPBS uses evidence-based prevention and intervention practices based on a tiered continuum of behaviours. The suspension rates have dropped in recent years. However, the Education Department's initiative "Let's take a Stand Together," with its extra criteria for suspension could lead these rates to rise.

Earlier this year teaching staff, student services staff, student councillors, and students who are often suspended, were surveyed about their thoughts and attitudes to the suspension process at Clarkson Community High School. Data collected indicated that there is a need for staff to have a 'reminder' meeting about the policies and documents involved in the suspension process. Some staff were aware that the Department's new initiatives are about violence in schools but were unaware of the details of the policy. Seventy percent of staff underestimated the amount of time it takes for deputies and the principal to complete suspensions. All staff could name some of the behaviours which lead to suspension. Seventy percent of staff could understand that students often attempt to come back to school even though they are suspended, because of friendships and the sense of belonging that school provides for them. Very few staff thought that students only want to be back to cause trouble. Whilst most staff could see that it is not good for the local community to have our students out of school, they could articulate the benefits for them and their students of having a break from certain student behaviours, which impact on the learning of the rest of the class.

Teacher comments included the need for more restorative meetings and a more thorough return from suspension process. However, most comments indicated their understanding of the need for care with students and the need to consider individual needs. Teachers could not identify the most often suspended students. This indicated that suspended students are not stigmatized and are always welcomed back to school and that staff continue to be optimistic about improvements in student behaviours.

The student councillors (part of the Student Voice Program) had never been suspended and were largely unaware of the policies and procedures round student suspensions. They could name some behaviours that lead to suspension and some of the most suspended students. They were not so understanding about students wanting to come back to school while they are under suspension. These students thought the processes were fair and also that the good standing policy is fair. Comments made were about the need for more recognition for students who demonstrate good behaviours at school, less tolerance for bad behaviours at school and the need for more efforts to keep all students safe at school.

The students who have been suspended often, thought the processes to be fair and could only think that more in-school suspensions could demonstrate more care for students. They could name strategies used by the school to try and prevent them from being suspended again and thought the good standing policy to be fair. These students could give reasons for students wanting to come to school even when they are suspended. They also could not name the most suspended students which maybe indicates that students who are often suspended are not seen as having status amongst other students. These students could give reasons why suspensions are beneficial for teachers and not beneficial for the local community. Comments made were that they are listened to and cared for during the suspension processes, they do not like the waiting around and would rather be sent straight home, and they are not always wanted at home when they are suspended.

Feedback is regarded as a very important component of visible learning and is one of the 10 mindframes for visible learning (Hattie & Zierer, 2018). Successful teachers are capable of both giving students feedback on their learning processes and of demanding and interpreting feedback from students on their own teaching processes. Hopefully this feedback concerning the different parts of the school's community on the suspension processes, will be of use to teachers when considering their involvement at either end of this disciplinary process.

References:

- Bradley, R. & Conwyn, R. (2002). Socioeconomic status and child development. *Annual Review of Psychology*, 53: 37-399
- Clarkson Community High School. (2017). *Annual school report 2017*. Retrieved from: https://www.det.wa.edu.au/schoolsonline/annual_report.do?schoolID=4160&pageID=AD08
- Hattie, J. (2012). *Visible learning for teachers: Maximising impact on learning*. London: Routledge.
- Hattie, J. & Zierer, K. (2018). *10 mindframes for visible learning. Teaching for success*. Routledge, London.
- Howard, C. L. (2018). *Independent Public Schools: An evaluation using large scale test data*. (Unpublished Masters Dissertation). University of Western Australia, Perth, Australia.
- Jeynes, W. (2007). The relationship between parent involvement and urban secondary school student's academic achievement. *Urban Education*, 42(1), 82-100.
- Noddings, N. (2013). *Caring, a relational approach to ethics and moral education*. University of California Press, Berkley.
- Perkins, M. (2015, October 28). 'Scared and scary': how trauma changes a child's brain. *The Sydney Morning Herald*. Retrieved from <http://www.smh.com.au/>
- Purkey, W. & Novak, I. (2014). *Fundamentals of invitational education*. (1st ed.). Kennisaw, GA: International Alliance for Invitational Education.

Promoting Student Ownership of I-CORT at Clarkson CHS

Steven Laing & Jasmita Jeshani

Jasmita Jeshani has worked with the Student Council to represent the student voice since 2018. Steve joined Jasmita as a teacher representative on the student council in 2019. In May 2019, they took the Student Council on a three-day camp to give the students an opportunity to build their leadership skills. Part of the focus of the camp was to help students properly understand what the I-CORT model is, and how the values it encompasses provide a safe, and therefore effective, learning environment at Clarkson Community High School. One of the first tasks the council took on after returning, was to organise their first all school assembly.

As is customary, a whole school assembly was run at Clarkson Community High School to bookend Semester 1. Whilst these traditionally include some recognition of achievement, the Student Council was given the opportunity to determine an appropriate theme and thence run the entire assembly. At the planning meeting, the student members brainstormed a few ideas, including bullying, pride, and mental health. No great surprise there, all these themes are particularly pertinent to most modern high schools. What was a surprise, however, was that the students decided that they wanted to theme their assembly around I-CORT, the concept of the *intentionality* of Care, Optimism, Respect and Trust, the outward behavioural values components that underpin the Invitational Learning model of Purkey and Novak (2014) that has been introduced and adopted by staff at Clarkson. It's a subject we've talked about with this student group a few times, including at our recent Student Council Camp, though these discussions have always been initiated by staff members. As is often the case with students, ideas coming from staff are often politely acknowledged, and then swiftly moved on to what students themselves consider more relevant. This time, however, the students decided that their assembly would be on this topic, suggesting their recognition that I-CORT actually covers and addresses the variety of other topics they had come up, but also that this is a whole-school concept, not just something that the staff like to bang on about, but something that very much includes them, and is a mechanism that they can use to help bring about the changes in the school that are important to them.

Previously, we've spent time with the Student Council talking about their perceptions about the problems at the school. The list isn't a short one, and many of the issues aren't insurmountable, they just need a change in attitude, predominantly within the student cohort. Whilst the I-CORT philosophy is well understood and practiced by the overwhelming majority of staff at Clarkson, who recognise that most students are much more capable than they themselves believe and encourage them accordingly. However, implementing such a culture change is much more challenging in practice than in theory, particularly where many students have been brought up with low expectations, poor self-discipline, and have somewhat short attention spans.

The assembly itself was simple, but effective. Definitions of each of I-CORT components were briefly explained by senior student council members, reinforced with slides containing photos of students and staff from previous events exhibiting those behaviours. This was followed by every student in the assembly writing a personalised I-CORT pledge on a modified CCHS logo; again, reinforcing the intentionality of their promised behaviour. Pledges will be displayed all around the school next term, as an ongoing reminder.

Following this, the students were informed of changes to an initiative started last year to encourage I-CORT behaviour around the school. This involved teachers writing an "I-CORT slip" for students when appropriate behaviour was recognised, with these slips being collected, and submitted when examples of all four virtues had been shown, enabling them a chance to win a canteen voucher. Unfortunately, the task was being far too easily overlooked by teachers, not through lack of desire just the usual classroom pressures. The adapted process enables students, as well as teachers, to write slips for others students who have displayed an appropriate I-CORT behaviour, though teachers will still countersign the slips for authenticity. We hope this will not only encourage greater ownership of the process and inspire positive behaviour by the students, it may also bring to the teachers' attention positive behaviours by students that they might otherwise have missed. If it encourages a little student altruism too, so much the better – we will be recording and giving those who write slips a chance for reward too. The end goal is positive behaviour recognition, and behaviour change – the more chances we have to positively reinforce these, the greater the chances that these behaviours will become part of an adapting, more positive school culture.

A behaviour that we are always trying to encourage, given its fundamental importance to learning, is attendance. As such we have a 90% Club where students who attend over 90% of the time are in the running for prizes. Usually drawn from the hat, in this assembly we introduced a new way to pick names. A free online program (wheelofnames.com) allows names of the qualifiers to be easily added to a wheel (see figure 1), which is then “spun”, till it finally comes to land on a name (which can then also be removed from subsequent draws as desired). Whilst winning is clearly the ideal outcome, students definitely like to see their names up on the board, and the transparency revealed the draw isn’t rigged. The tension when the wheel was spun was palpable, particularly when the wheel looked to be stopping on one student only to click over to the next. Students were highly enthusiastic, watching expectantly and applauding the winners, who were happy to come up to the front to allow appropriate recognition of their positive behaviour. If this encourages students to change their attendance behaviour, then it’s a job well done. (As an aside, this tool can also be used in class for questioning as it makes students accountable. Interestingly my younger students see it as a game and are thus more likely to be engaged in the process.)

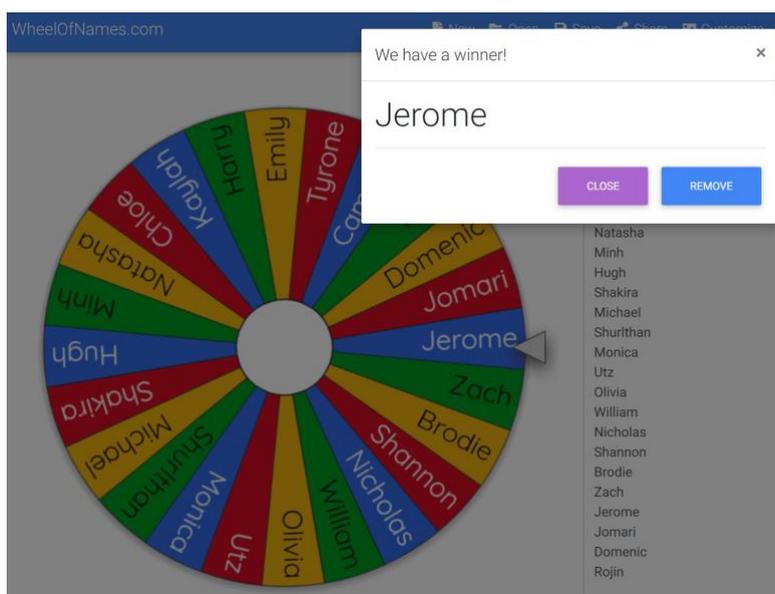


Figure 1: Sample wheel of names with a winner revealed

Finally, Principal Young took the opportunity to reinforce some of the key messages about this philosophy that he originally introduced to the school, he congratulated all those who made it onto the wheels for their positive attendance, thanked the staff, students and student council for their efforts, and spurred them on to greater things in Semester 2.

Whilst it is of course difficult to measure whether the message has got through to every student, checking next semester’s attendance figures, as well as counts of the I-CORT slips submitted, will provide us with data to help determine the effectiveness of these initiatives. But at least for our student leaders, we know that the message has very much become embedded, and that is very much a step in the direction that Clarkson CHS wants to be taking.

References:

Purkey, W. & Novak, I. (2014). *Fundamentals of invitational education*. (1st ed.). Kennisaw, GA: International Alliance for Invitational Education.

Driving School Improvement at Clarkson Community High School in 2020

Thomas Jones

As Head of Learning Area (HoLA) English and Humanities, Level 3 Classroom Teacher (L3CT) and occasional Acting Deputy Principal, Thomas takes a keen interest in innovative and student-centred curriculum, rigorous assessment practices, data application and high trust cultures. He has strengthened his leadership acumen through completing the Masters of School Leadership degree at the University of Western Australia and the Growth Coaching International (CGI) Accredited Coach qualification. Thomas is a member of the Department of Education's 2019 Leadership Strategy Advisory Group to review the implementation of the WA Public School Leadership Strategy 2018 – 2021.



Introduction

Clarkson Community High School demonstrated in 2018, with intentional use of instruction, a commitment to data-based decision making and a focus on evaluating our impact; we can accelerate the learning for our students experiencing social inequity and disadvantage. 2018's NAPLAN results represented a marked improvement compared to 2017 data. Our students' *Spelling, Grammar and Punctuation, Writing and Numeracy* achieved *Higher Progress* and *Higher Achievement* compared to *Like Schools*.

In order to sustain an improvement trajectory, this paper explores the efficacy of using the school improvement framework *Driving School Improvement: A Practical Guide (2017)* by Pamela Macklin and Vic Zbar to support the creation of Clarkson Community High School's 2020-2021 School Strategic Plan.

This paper also explains how *The 10 Mindframes for Visible Learning: Teaching for Success (2018)* by John Hattie and Klaus Zierer and a number Department of Education strategic documents can inform our 2020-2021 school planning. *The Mindframes* have underpinned our policies, programmes, processes and education philosophy since 2018.

Why Consider Using *Driving School Improvement: A Practical Guide*?

Although there is a plethora of books on school improvement and how to achieve it, many treat all schools as if they are the same which commonly leads to a 'one size fits all' approach. This may work in some schools, but by no means all. *Driving School Improvement* posits that schools can identify where they are on their improvement journey and then provides the strategies and supporting tools to enable schools to advance. The authors explain that schools can then use the framework to craft their own strategic responses, based on relevant research and experiences from other successful schools.

The Planning Process

School planning must be connected to what happens in the classroom as teachers will have the greatest school-level influence on student achievement. Plans should be succinct, but must include objectives, priorities, improvement targets, whole-school strategies, resources, reference to systemic policies and directions, evaluation measures and a timeframe, including a provision for annual review (Department of Education, 2008). In addition, school plans may include beliefs and values and non-priority areas to be sustained.

The School Improvement and Accountability Framework (Department of Education (DOE)2008) recommends structuring a school strategic plan around five school operations which schools have some control and are the pre-requisites or enablers of successful students.

1. Quality of **teaching** – both what is taught and how it is taught
2. Safety and inclusiveness of the **learning environment**
3. Efficiency with which **resources** are allocated
4. Quality and distribution of **leadership**
5. Effectiveness of internal and external **relationships**

The Preconditions

During 2008, Vic Zbar, along with his colleagues Ross Kimber and Graham Marshall, undertook a major research project for the Victorian Department of Education and Early Childhood Development (DEECD) to identify the reason behind the success of eight high performing, disadvantaged government schools. While the context differed in each of these schools, the way in which they all substantially improved was the same. In all cases, the schools began by ensuring a set of preconditions for whole-school improvement were in place on which further improvement efforts could then be built. *Driving School Improvement* articulates the four preconditions or foundations for whole-school improvement.

1. Strong leadership with a clear vision and direction for the school.
2. High expectations for all the students the school enrolls.
3. An orderly learning environment throughout the school where students are well known by the staff.
4. A focus on what matters most.

Quality of Teaching

The book's third precondition, *High levels of expectation and teacher efficacy* has a position at the forefront of our school's thinking and connects to quality of teaching. Teachers having and promoting high expectations for all students and challenging the belief that 'you can't expect more of these kids' builds a feeling among staff that they have the capacity to make a difference for the students they teach. Mindframe 5- *I strive for challenge and not merely doing your best* from Hattie and Zierer's work aligns to the fore mentioned precondition. We know our students experience joy "when her or his effort and hard work is followed by success" (Hattie & Zierer, 2018, p98). As teachers, we are responsible to create the conditions that allow each and every student to succeed when facing challenging tasks. If our school adopts the *quality of teaching* prerequisite as part of our 2020-21 planning, *Driving School Improvement'* framework tools equip us to examine what is taught and how it is taught.

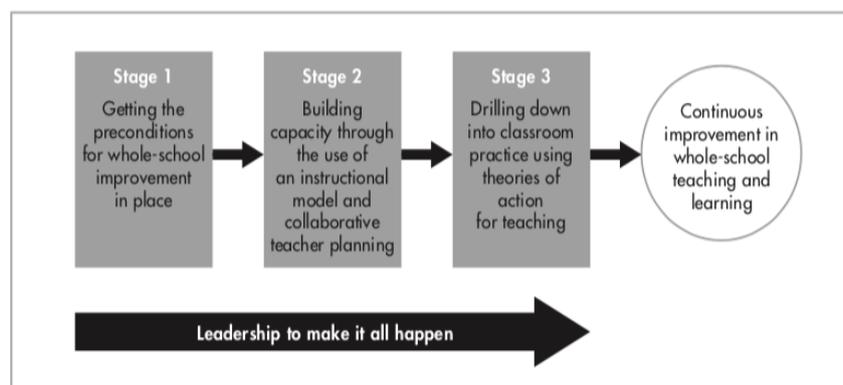


Figure 3

Stage 2 of *Driving School Improvement'*s framework again connects to the *quality of teaching* enabler. At this stage, the *Practical Guide* recommends schools build capacity through the use of instructional models and collaborative teacher planning (Figure 1). The *Madeline Hunter Lesson Plan Model* ("Madeline Hunter method", 2007) or the *Hume Central Secondary College Explicit Teaching Model* (Ryan, 2011) are potential models we can explore as structures to promote the use of a common language around the school to strengthen discussion about learning. The *10 Mindframes* also advocate building capacity in a number of their chapters. In particular, Mindframe 7 - *I Explicitly Inform Students What Successful Impact Looks Like from the Outset*, explains high performing teachers consistently present worked examples and teach explicitly to unpack challenging concepts and skills (Hattie & Zierer, 2018, p170).

Stage 3 of *Driving School Improvement'*s sustained improvement process sees teachers shift the focus from an inference of what they think might work to evidence of what actually does, including from successful practice in other schools. This stage can again align to the *quality of teaching* enabler through articulating how we draw on theories of action that are aligned to research and enable more teachers to work like the best teachers in the school. This is particularly the case when they are linked to regular classroom observation where constructive

feedback is provided to enable the research-based improvements to be made. The final and tenth Mindframe - / *Focus on Learning and the Language of Learning* aligns to Macklin and Zbar's theories of action recommendation. Knowledge of the students' initial learning level and the willingness to take it as a starting point for instructional thought and action may be seen as fundamental for successful teaching and learning. Hattie and Zierer (2018, p180) encourage the intentional use of Piagetian programmes, prior achievement, personality and concept mapping. Do we occasionally produce unstructured lessons consisting of vague assignments and confusing worksheets? Teacher discourse centred on the *language of learning* prevents students from experiencing this type of cognitive overload. Drilling down into classroom practice also involves staff de-privatising their practice in the form of lesson observation. We are proud at Clarkson to possess a culture where groups of teachers determine what peer observation approaches work best in their context using the AITSL website and a range of proven resources. A recent survey indicated peer observation had encouraged openness and the sharing of practice. Our teams have formed learning triads, employed the Swivl Camera and actioned Japanese lesson study to better understand their impact on learning.

Safety and Inclusiveness of the Learning Environment

Driving School Improvement: A Practical Guide possesses the strategies and supporting tools to allow us to examine the *safety and inclusiveness of the learning environment* enabler as the guide's second precondition relates to *ensuring an orderly learning environment where student are well known*. In order for a school to engage with *safety and inclusiveness*, the *Driving School Improvement text* recommends we must establish clearly documented expectations and processes for student wellbeing, behavior and discipline. There must also be consistent implementation of processes that are required to ensure an orderly learning environment and structures to ensure students are well known to staff.

Quality and Distribution of Leadership

Our Clarkson strategic plan must include our approach to strengthen and distribute leadership. In review of the impact that leadership has in schools, Leithwood, Seashore, Anderson and Wahlstrom found evidence to suggest that successful leadership can play a 'highly significant—and frequently underestimated—role in improving student learning' (2004, p6). At a more detailed level still, they found that:

- Leadership is second only to classroom instruction among all school-related factors that contribute to what students learn at school and, as our own more recent high-performing schools research has demonstrated it is leadership that sets the conditions for teachers to perform effectively in the classroom, or not.
- Leadership effects are usually largest where and when they are needed most, such as in highly disadvantaged schools.

Making things happen depends on knowing where to start and how. This requires our Principal and leadership team to first determine where Clarkson CHS is at, what its major strategic challenge is, and the range of potential strategies that can be adopted in response.

Key Department of Education Documents for School Improvement and Accountability

Focus 2020, High Performance – High Care Strategic Plan for WA Public Schools and the Aboriginal Cultural Standards Framework (ACSF) all inform how we craft our 2020-2021 Plan. Focus 2019 directed us in 2018 to 'focus on growth in student achievement in addition to attainment' and 'to enhance tools that schools use to understand, analyse and act these two indicators of performance'. If we choose the effectiveness of internal and external relationships as the fifth pillar for our school improvement planning, the ACSF Relationships standard offers the language and aspiration to strengthen our plan especially in our context as a school where 15 percent of our students are Aboriginal. The Relationships standard requires schools to become culturally responsive and foster positive participation, communication and interaction between staff, Aboriginal students, their parents and families, and the local Aboriginal community (Department of Education, 2015).

Conclusion

Driving School Improvement: A Practical Guide by Pamela Macklin and Vic Zbar (2017) possesses enormous potential as a framework to support a school improvement cycle where we can assess our performance, plan for improvement and act on our plans. The language from the *improvement stages* and *preconditions* in *Driving School Improvement* can underpin the enablers or prerequisites of the school plan. The major aspect of all the texts explored is school leadership. Leaders who focus on teacher pedagogy and practice are likely to have the greatest impact on student achievement. By encouraging expert teachers to operate collaboratively and share their skills and understandings, good school leaders nurture, develop and expand quality teaching in the school. *The 10 Mindframes for Visible Learning: Teaching for Success* has evidently influenced our practice since 2018 and supports *Driving School Improvement's* ethos and recommendations.

The process of our school planning is arguably more important than the planning document itself. The effectiveness of the school planning process is best measured by the extent to which all members of the school community understand the school's purpose, have contributed to establishing the school's objectives, understand what these mean and are actively implementing and supporting what has been planned (Department of Education, 2009).

References

- Department of Education and Training (2015). *Aboriginal cultural standards framework*. Retrieved from: <http://det.wa.edu.au/aboriginaleducation/theme/carnelian/detcms/navigation/aboriginal-education/>
- Department of Education and Training (2015). *Focus 2019*. Retrieved from: <http://det.wa.edu.au/policies/detcms/policy-planning-and-accountability/policies-framework/strategic-documents/focus-2019.en?cat-id=3457058>
- Hattie, J., & Zierer, K. (2018). *10 Mindframes for visible learning*. London: Routledge.
- Leithwood, K., Seashore, K., Anderson, S., & Wahlstrom, K. (2004). *Review of research: how leadership influences student learning*. New York: The Wallace Foundation.
- Madeline Hunter method (2007, May 2). Retrieved from: http://edutechwiki.unige.ch/en/Madeline_Hunter_method
- Ryan, D. (2011, May 23). Makeover turns school into a model of change. *The Sydney Morning Herald*. Retrieved from: <https://www.smh.com.au/education/makeover-turns-school-into-a-model-of-change-20110520-1ewky.html>
- Macklin, P and Zbar, V (2017). *Driving school improvement: a practical guide*. Camberwell, Victoria: Australian Council for Educational Research.
- Madeline Hunter method, Edutechweekly, 02 May 2007, viewed 14 August 2019 http://edutechwiki.unige.ch/en/Madeline_Hunter_method
- Mourshed, M., Chijioke, C., & Barber, M. (2010). *How the world's most improved school systems keep getting better*. London: McKinsey & Company.
- Department of Education (2009) *School Planning: An advice paper to support the school improvement and accountability framework*. Retrieved from: <http://det.wa.edu.au/accountability/detcms/education/evaluation-and-accountability/school-planning/school-planning.en>
- Department of Education and Training (2008) *School improvement and accountability framework*. Retrieved from: <http://det.wa.edu.au/policies/detcms/policy-planning-and-accountability/policies-framework/guidelines/school-improvement-and-accountability-framework.en>
- Zbar, V., Kimber, R., & Marshall, G. (2008). *How our best performing schools come out on top: An examination of eight high performing disadvantaged schools*. Melbourne: Victorian Department of Education and Early Childhood Development.

Connectivism at Clarkson Community High School

John Keyworth

John Keyworth joined the Clarkson team in 2004 as a technology honours graduate teaching computing. He has always strived to inspire young minds with the possibilities that new technologies bring, preparing them for jobs that are yet to be invented. During his time at Clarkson, John progressed to Level 3 Classroom Teacher, Head of Department and Acting Deputy principal gaining a wide variety of teaching and management experience.



His passion is technology, both at school and home, including digital photography, 3D printing, video production, music technology and computer building. John even holds a commercial drone pilot license and his work has been featured in state and international publications.

Have ever visited YouTube to watch videos on how to fix your broken car? Maybe you've joined your local Facebook community group to keep abreast of what's happening in your area and contribute to the discussions? Perhaps you're an active member of an internet forum built around a specific community, product or common interest? Have you ever made your own website or video channel? If you said yes to any of the above, then you're an active player in digital connectivism and a fully-fledged digital citizen.

Connectivism is a learning theory that explains how Internet technologies have created new opportunities for people to learn and share information across the World Wide Web and among themselves. These technologies include web browsers, email, wikis, online discussion forums, social networks, YouTube, and any other tool which enables the users to learn and share information with other people. (krist2366, 2015, para. 1)

YouTube is a classic example of connectivism being a giant social media community of distributed learning – the second largest search engine in the world processing more than three billion searches per month with hundreds of hours of video being uploaded every minute. Content creators have knowledge and skills that they share in the form of their video uploads. Community members (account holders/viewers etc.) can consume the information, learn from it and share it with others. It is a fantastic example of cloud technology connecting creators and consumers simply for the goal of learning.

Downes (2011) also emphasises that “connectivism redefines what it means to learn and that the capacity to learn is more critical than what is already known. Learning occurs by participation in the network and is influenced by the diversity of networks and the strengths of the connections.”

In other words, “the emphasis is no longer on the content but on the interaction and the communication. Personal knowledge is not constructed but developed by being immersed in the community.”

Similarly, the Australian Government e-Safety Commissioner (2019) defines a digital citizen as:

“A person with the skills and knowledge to effectively use digital technologies to participate in society, communicate with others and create and consume digital content.”

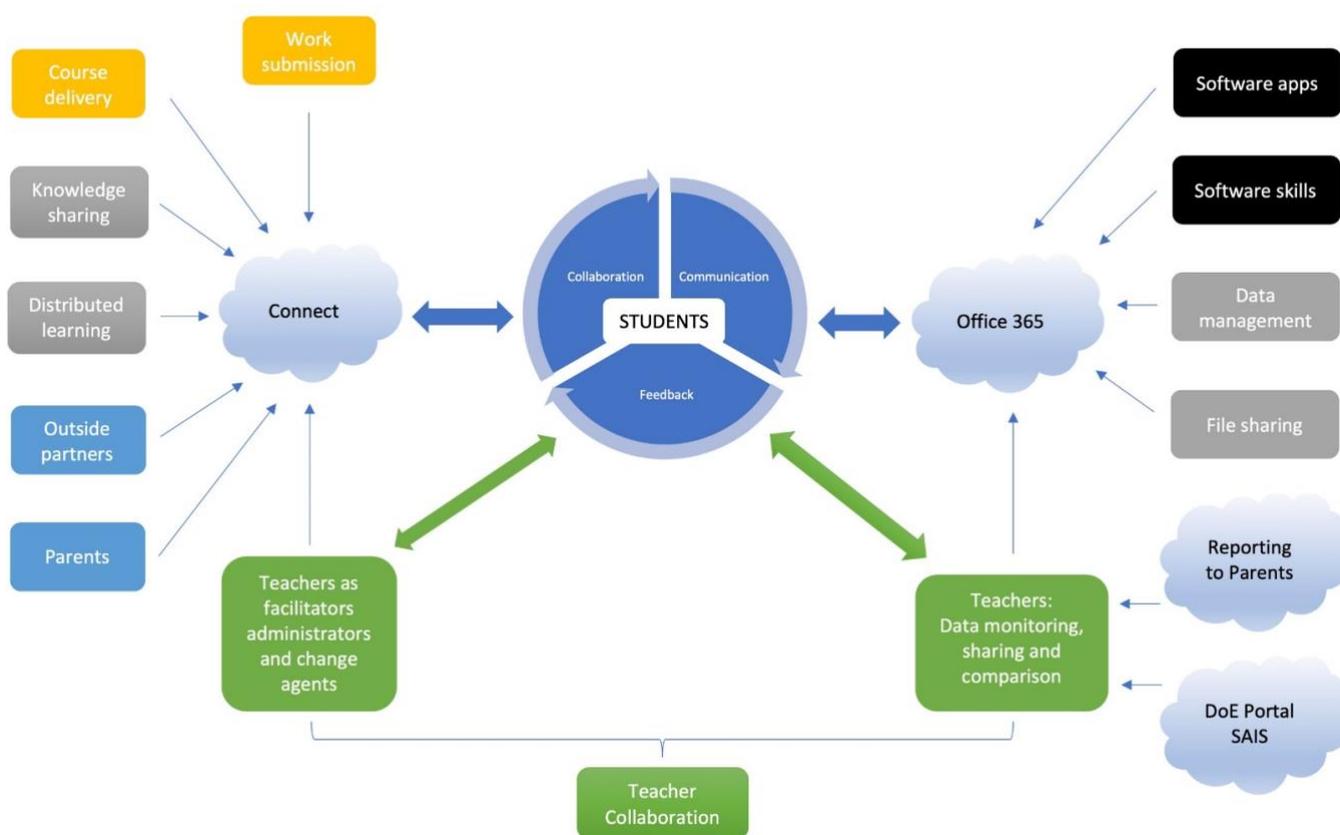
Therefore, if you combine the concepts of connectivism and digital citizenship you end up with bustling internet communities sharing knowledge and experiences across peer networks for a common purpose, created and consumed by people with the skills to operate in a digital environment. Your classic social media community. This is also true for our learning community here at Clarkson.

Back in 2006 we introduced our first online learning system (Moodle), which was an online learning community for teachers and students to come together for a common cause – learning! Nowadays we're taking that concept many steps further with the Connect system and the newly released Office 365 system – both are cloud computing applications used to facilitate learning, share information, collaborate at all levels and improve the quality of teaching. In other words, teaching our students to be competent digital citizens by utilising connectivism – the capacity to learn.

Along with the concept of connectivism, we also actively employ and are very aware of John Hattie’s “10 Mindframes for Visible Learning”. In this case, the main mindframes in use are:

- I focus on learning and the language of learning
- I am a change agent and believe all students can improve
- I inform students what success looks like from the outset
- I work with other teachers to develop common conception of progress
- I collaborate with others about my progress and impact
- I seek, give and act upon feedback

Digital Connectivism and Mind Frames at Clarkson Community High School



The graphic above shows how Hattie’s Mindframes and connectivism come together in our school.

On one side the Connect system literally connects students, parents and teachers together in an online learning environment. Courses can be delivered and work submissions marked and timely feedback given all in the same place. Teachers store their courses online along with exemplars of what success looks like. Giving students examples of success helps them understand what is required and gives them a clear goal to aim for. Teachers can also augment their course materials by utilising distributed learning opportunities from outside entities like social media, external learning communities, outside partners like TAFE and any other site that promotes knowledge sharing and distributed learning. Students can join some of these communities (such as Maths Pathway) and learn from each other as well as at home with the web being a 24/7 operation. Parents with their Connect accounts also have a big role to play by monitoring their child’s progress, encouraging motivation and even helping with their studies.

On the other side we have our new Office 365 cloud system. This is Microsoft’s business package that includes all the industry-standard Office apps like Word, Excel, PowerPoint, Sway and Outlook as well as file storage and sharing with OneDrive. Students learn valuable software skills by using the apps in their day-to-day tasks - using email for communication, storing all their work in the cloud for access 24/7 on any device and collaborating with

each other on group assessments by sharing documents amongst the group with each team member working on their particular section.

Teachers also use the Office 365 platform in a similar way. We use the same apps the students use for work related tasks. However, in this case data collaboration also plays a big role in the way the apps are utilised. Teachers use assessment data from Reporting To Parents or the DoE Portal to share amongst their learning areas in the form of a group spreadsheet which teachers in that specific learning area can access securely online. Every four weeks those teachers enter their A – E grade spread for each of their classes for the intention of monitoring and sharing with each other. This helps improve teaching in several ways – it provides a balcony view of progress for learning area managers as well as providing opportunities for teachers in the same subject to compare results, learn from each other and work together to maintain consistency and improve teaching if necessary. It also helps to prevent “surprises” – those terrible moments at reporting time when parents find out their child has E grades. This system helps identify “at risk” students early and prompts immediate action to assist those students before it is too late. We do this in conjunction with parents, either by phone calls home or by parents having access to Connect where they can monitor their child’s progress in real time.

This is what I like to call “smart data”. In the same way a 2019 Apple iPhone can be called a “smart phone” and a 1999 Nokia 3310 can be called a “dumb phone”, data can be smart or dumb.

“Dumb data” is paper sitting in a folder somewhere not accessible unless you are actually in the room. It helps nobody but the reader – its inconvenient, immobile and inaccessible. Even data sitting on a network drive could be described “dumb data”. It is generally raw information that can only be accessed from within the school during work hours and by only one user at a time. In a similar way, “dumb phones” lack connectivity to the internet and thus the networking opportunities that entails. “Smart phones” are the exact opposite as we all know.

“Smart data” is in the cloud – a place where it can be shared, analysed, monitored and acted upon at any time, from anywhere and on any device using clever software applications that promote connectivity and collaboration – in our context namely Connect and Office 365.

As Hattie says, teachers must be change agents that facilitate learning as well as teach. In this day and age, we as teachers must embrace modern technology and the learning opportunities it brings. We should be moving away from wads of “dumb” photocopying and moving towards using digital communities to foster connectivism and guide students towards information for answers to their questions. We must teach our students the capacity to learn - to seek out information on their own and express what they find. This is not to suggest advocating for simply “copy and pasting” information from the internet – more so to learn how to seek out the information required and act upon it constructively.

I’m sure you already have those skills – a good example being the ability to search YouTube or internet forums looking for the solution to why your car air conditioner has packed up and how to fix it. I know I have many times and I’ve saved a fair heap on garage repair bills! You may even be a content creator sharing your knowledge for others to benefit from. You and I already are digital citizens and we’ve learned the benefits of connectivism perhaps even without being aware of the concept. Would visiting the library help us to fix our cars? Possibly, but it would take much more time and effort.

That’s “smart data” versus “dumb data” right there!

References

Australian eSafety Commisioner (2019) Digital Citizenship. Retrieved from: <https://esafety.gov.au/education-resources/classroom-resources/digital-citizenship>

Downes, S. (2010). New technology supporting informal learning. *Journal of Emerging Technologies in Web Intelligence*, 2(1), 27-33.

krist2366 (2015, June 1) Connectivism (Siemens, Downes).[Blog Post] *Learning Theories*. Retrieved from: <https://www.learning-theories.com/connectivism-siemens-downes.html>

Siemens, G. (2005). Connectivism: A learning theory for the digital age. *International Journal of Instructional Technology and Distance Learning*, 2(1), 3-10.

Using Data Effectively

Steven Bishop

Steven Bishop joined the Clarkson Team in 2015 teaching in both the Mathematics and Design Technology departments. He also currently works as the DATA Coordinator and runs an OLNA readiness program for upper school students. Before starting at Clarkson Steven had taught in several Wheat Belt district high schools. Prior to his teaching career Steven worked as a Contracts Administrator for a construction engineering company.



It would be hard to find an employee in the education sector that doesn't think that data isn't important in evolving educational progress. As teachers, we are inundated with data daily and are constantly referring to the latest data for guidance. A quick look at your Portal gives you access to SAIS, EARS, First Cut and more. Much of this Data is left raw and not interpreted or put into good use by schools. Other data becomes known as "Catalyst" data as it just leads to further data collection without being useful on itself Matters, G (2009).

As a teacher, it is important to know what data is worth collecting and how it could be processed to achieve student progress.

Observational data

This happens continuously throughout a lesson with the teacher observing the class. Each class provides teachers with unique information about each student. Teachers can make notes about where to stand in the class for best responses from the students. How does student engagement differ from individual work compared to group work? How do students prefer to answer; orally, digitally or written.

While observational data is easily collected and quickly processed, it is difficult to collect with any consistency and without bias. Are the quiet achievers getting recognition they deserve? It is difficult to collect consistent observational data across the lesson as teacher's priorities are changed (Renshaw, Baroutsis, Van Kraayanoord, Goos & Dole, 2013).

Formative Data

Teachers often collect formative data in the form of short quizzes, mini tests or even a show of hands to show understanding of a particular concept. Formative data is good to use to reflect upon your own teaching practices. It is easy to understand and quickly processed becoming a good guide as to where to direct the class in the future.

Standardised Tests, Exams and Project Work

Summative data is collected from the examinations at the end of the teaching unit or a project on the teaching unit. This data is good reflection of an individual's understanding of the unit.

Student Reported Data

Student self-assessment involves students in evaluating their own work and learning progress. Self-assessment is a valuable learning tool as well as part of an assessment process. Through self-assessment, students can identify their own weakness and see where more attention is required. It also allows them to set themselves their own goals and keep a track of their own progress.

This process helps students stay involved and motivated and encourages self-reflection and responsibility for their learning.

You should set clear expectations for student performance. As in peer assessment, you need to coach students on assessment criteria and how to apply them in grading their work. Give them practice assessing themselves.

A valuable process on its own, self-assessment may be paired with peer assessment. Applying knowledge gained through peer assessment, students' self-assessment can be a potent next step in actively promoting their own learning and achievement (Matters, 2009).

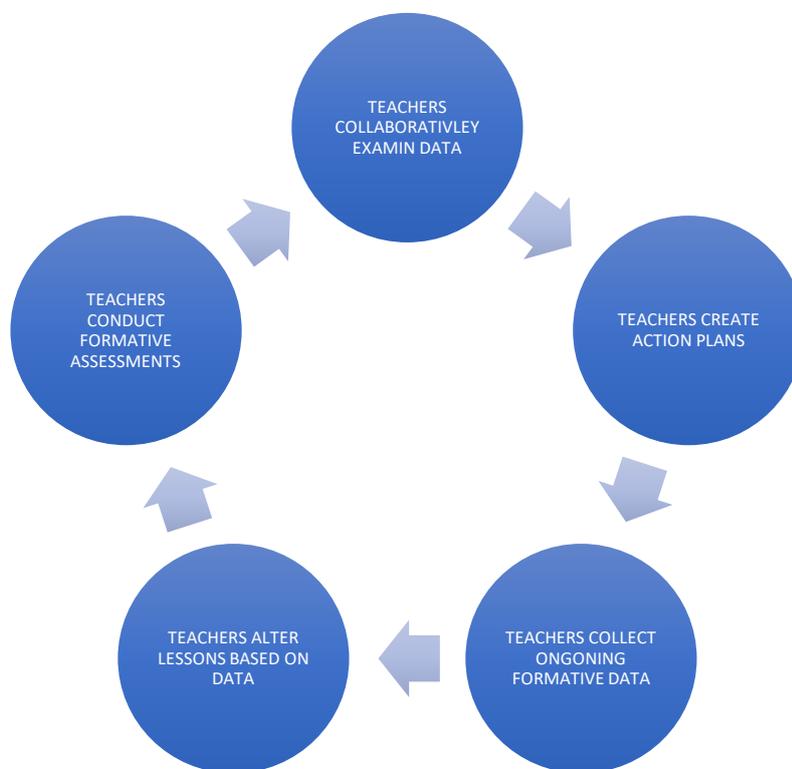
Pre and Post Tests

Pre and post tests are designed to measure your students' growth in knowledge of a particular topic. Growth can be measured by comparing the pre-existing knowledge with the end of unit gains. The pre test's data provides a fantastic starting point for teachers and makes for efficient use of lesson time. Goals can be set based on the data received and the results can accurately demonstrate the progress achieved by the class or student, not just their current achievement. The post test not only provides great individual feedback, it can show the effectiveness of the teaching strategies on the learning group as well.

Acting on Data

Analysing data is an important first step. However, the real impact on student achievement comes when teachers create an action plan and then use it to guide instruction, collect ongoing formative data, and adjust to meet the needs of students. Commonly referred to as the data cycle, data collection, analysing and dynamic teaching adjusting to your new goals becomes ongoing and repetitive (Renshaw et al, 2013).

Data Cycle



References

- Matters, G. (2009) *Using data to support learning systems in schools; Students, teachers, systems*. Australian Council for Education Research
- Renshaw, P., Baroutsis, A., Van Kraayenoord, C., Goos, M., and Dole, S. (2013). *Teacher using classroom data well: Identifying key features of effective practices*. The University of Queensland.

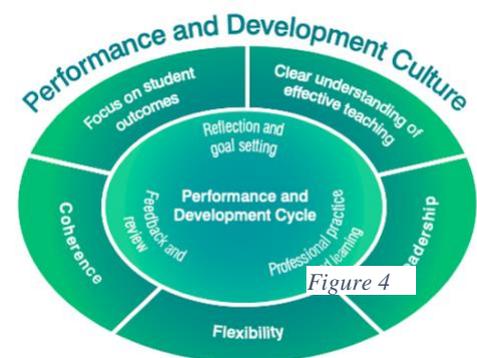
Enhancing Clarkson Community High School's Performance Culture in 2019

Thomas Jones

As Head of Learning Area (HoLA) English and Humanities, Level 3 Classroom Teacher (L3CT) and occasional Acting Deputy Principal, Thomas takes a keen interest in innovative and student-centred curriculum, rigorous assessment practices, data application and high trust cultures. He has strengthened his leadership acumen through completing the Masters of School Leadership degree at the University of Western Australia and the Growth Coaching International (CGI) Accredited Coach qualification. In 2018, Thomas was invited to join the Department of Education's 2019 Leadership Strategy Advisory Group to review the implementation of the WA Public School Leadership Strategy 2018 – 2021.



The question of how to move a teacher from their current level of effectiveness to a higher level of effectiveness is a challenging question and there is not one simple solution. Australian schools have generally been stronger on the development part than the appraisal part; however, an effective approach to performance building must balance both. At Clarkson CHS, we support teachers' classroom performance through tailored feedback and provide targeted professional support that addresses each individual teacher's needs. *Enhancing Clarkson Community High School's Performance Culture in 2019* explores how we can continue to build an authentic performance culture through harnessing achievement data analysis, engaging with peer observation processes and truly listening to the student voice. The article also attends to the important role leadership traits play when building or enhancing a performance culture. Throughout the paper, I make consistent reference to the *Australian Teacher Performance and Development Framework* (the Framework) **Figure 1** which provides a convenient outline of the critical factors for creating a performance and development culture in schools.



What is a Performance Culture?

An authentic performance culture sees all teachers take collective responsibility for high quality teaching and sustained poor performance by any individual teacher is addressed ethically and professionally. This involves creating a set of norms where there is enough trust, ownership and openness for all teachers to consider how their teaching might be improved. School leaders can sharpen the focus on teacher performance through acquiring skills to create a performance culture throughout the school.

The *National College for Teaching and Leadership* in the UK explains the dominant factor in securing consistent and sustainable high-performance culture is the personal performance of the middle leader and their focus on the performance of the team and the individuals in that team. Modelling high performance seems to be one of the most compelling and credible leadership approaches available to any leader. There seems little doubt that the language and behaviour of middle leaders are also significant variables in creating a high-performance culture.

A Baskets of Methods

There are multiple ways to create an environment for professional growth and for the assessment of individual teacher's effectiveness. Different sources of evidence have been identified and preferred in schools but essentially no method is without flaws. Each of the evidence sources on its own provides only partial information about how well a teacher is teaching. Various combinations used in a system designed in collaboration with teachers and modified in the course of implementation, can provide a sound basis for providing feedback on a teacher's classroom performance.

The Grattan Institute's (2012) report acknowledges that each method provides incomplete information about how well a teacher is teaching.

The report lists the following sources of evidence for teacher appraisal:

1. Student performance data
2. Peer classroom observations
3. Line manager classroom observations
4. Student feedback
5. Teacher self-assessment
6. Parent feedback
7. External classroom observation
8. 360-degree feedback

Evaluating Our Impact at Clarkson

At the core of a high-performance culture is a process about how teachers will be involved in evaluating their own teaching and the impact it is having on their students. The *Framework's* first factor that contributes to a performance and development culture is the *focus on student outcomes*. Kane (quoted in Bill & Melinda Gates Foundation, 2013) notes that, 'If we want students to learn more, teachers must become students of their own teaching'. Highly Accomplished teachers work with colleagues to use data from student assessments to evaluate learning and teaching, identify interventions and modify teaching practice (AITSL Standards 2017). The CCHS English and HaSS Learning Area engage with a school-wide five-week data review process to capture timely information about student progress. In Term One, a single 'anywhere' Microsoft OneDrive excel data document was created for team members to examine their classes' progress and the grade composition of other classes. My Year 8_2 English class data from the OneDrive document (**Figure 2**), represents an example of how the team can reflect on student performance collectively.

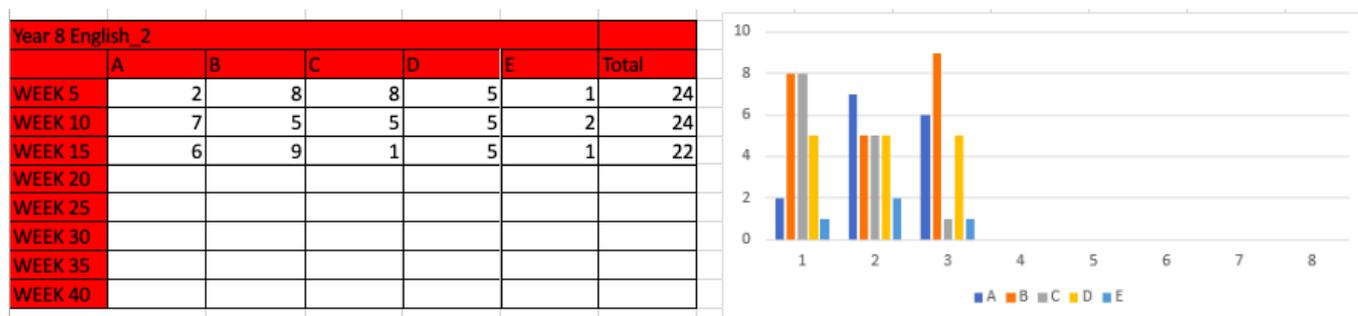


Figure 5

This approach has proven to be successful with HaSS teachers approaching their English counterparts and vice versa to 'face the data'. The formal and informal dialogue to discuss our impact on classroom practice enables us to intervene quicker and collectively find solutions to learning deficits. If there are five more A grades in my English class than the HaSS class with the same students, my HaSS colleagues and I need to examine assessment rigour, differentiation practices, moderation and student profiles. Staff at Clarkson CHS employ the *5 Week Data Review* to examine their impact and use data, not opinion to communicate practice.

De-Privatising Practice

School leaders' subjective assessments of teachers are often effective predictors of student achievement. Jacob and Lefgren (2005, p. 2) found that '...assessments of teachers predict future student achievement significantly better than teacher experience, education, or actual compensation....'. As a Head of Learning Area conducting classroom observations, acknowledging the timing and frequency, level of trust and my own skills in giving feedback, is required. The AISTL website has proved invaluable to support my own skillset. When implementing a process of classroom observations, it is important to consider that teachers will not accept a performance appraisal system that is seen to 'manage' them. The lesson learned from the 2014 introduction of a new teacher appraisal scheme in Victorian public schools provides us with a case study for continual reference.

‘Rather than being done with and for teachers, many measures advocated and being hastily and poorly implemented in the quest to improve teaching and learning, are essentially being done to teachers and without their involvement, almost guaranteeing resistance, minimal compliance and inefficiency’ (Stephen Dinham, 2013).

In *Implementing a Performance and Development Framework*, Jensen and Reichl (2012, p.11) note:

Appraising others’ performance, being appraised, providing feedback – none of these things are easy. They come naturally to some, but to the majority they are learned skills. To most in the teaching profession they are foreign and intimidating prospects.

In Term Two, we launched a whole school peer observation initiative to supplement formal line manager classroom observations that take place at the beginning and end of each year. Peer observation involves teachers observing and providing feedback to other teachers. The success of this as a method for providing teachers with information about their teaching depends on the school climate, clarity of purpose, level of trust and a host of other factors relating to the way the system is implemented. Peer observation is an important and effective way of changing the culture of a school from one where staff operate in isolation or in ‘silos’ to a more open and collaborative one. In our recent General Staff Meetings, the peer observation groups shared their de-privatisation stories with other groups to inspire staff to engage further with the process. The project has supported the sharing of practice and built awareness about the impact of my colleagues’ own teaching and developed a clear understanding of effective teaching in order to affect change.

All Perspectives Are Valuable

“The average student knows effective teaching when he or she experiences it”

(MET Project, 2012, p.1)

Clarkson’s school ethos is underpinned by Invitational Education; a practice to create, maintain and enhance human environments that invite people to realise their potential. Democratic practice underpins the theory to promotes the idea that everyone in an organisation has a perspective that is valuable and needs to be incorporated into schoolwide discourse.

Research findings indicate that student voice, agency and leadership have a positive impact on self-worth, engagement, purpose and academic motivation (Quaglia, 2016), which contribute to improved student learning outcomes (Figure 3).

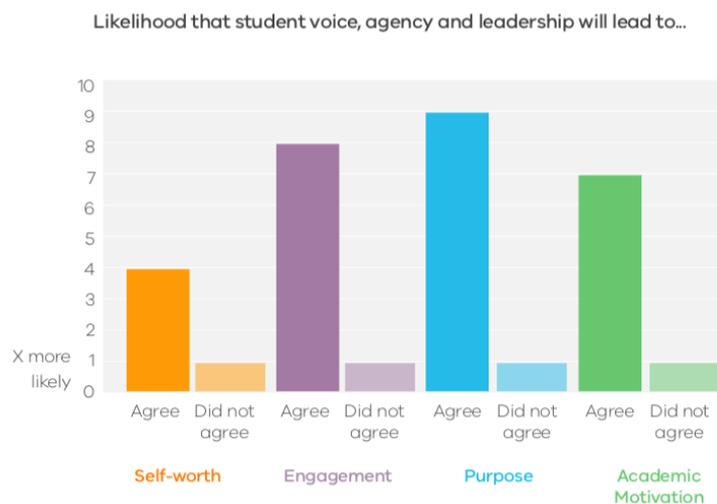


Figure 3

Clarkson has built a culture where teachers and students work together and student voice is heard and respected. Teachers and school leaders receive valuable feedback that can lead to improved teaching practice and contribute to school improvement. Students feel more positive and connected to their school and see themselves as learners and better understand their learning growth. Our school’s

Student Council, facilitated by teachers Jasmita Jeshani and Dr Steve Laing, exemplifies democratic behaviors through the collection of survey evidence augmented by student observations about the relative effectiveness of certain teaching behaviours and student sentiment toward learning. The *MET Project Policy and Practice Summary (2012)* confirms student survey results correlate as strongly with predictions about student learning as classroom observations do, and that they prove a more reliable measure than observations alone. The student council should acknowledge that students can report on teachers with a high degree of reliability, however the validity of the survey results depends on the instrument used (Goe, 2007).

Some commentators like Goe claim that student perception surveys are more likely to measure teacher popularity than effectiveness. The evidence, however, suggests that a properly constructed survey instrument can provide valid and reliable information as one part of a suite of measures. The more frequent the surveys, the more useful the information. The age of students also affects how the surveys should be designed. In particular, it is important to note that primary students tend to rate teachers more generously than older students.

Trust and Leadership Traits

While trust in leadership is significant, we cannot underestimate the evidence about the importance of trust between teachers. If teachers don't trust their colleagues, the atmosphere required for successful collaborative work will not exist (Harris et al, 2013).

Hattie (2012) believes that trust is essential to the effective implementation of the 138 'influences' on learning and explains that 'professional discussions (amongst teachers) must be conducted in an atmosphere of trust more than an atmosphere of accountability'.

He gives particular attention to the association of trust and willingness to make errors and treat them as opportunities to learn. He believes that to get better teachers need to be comfortable about making errors and trust is essential for this.

'...In order for us to build the high-performance culture, leadership must cultivate the environment for trust.'

Leaders who demonstrate personal integrity, commitment and honesty are reported to develop stronger and more trusting relationships with teachers. (Brewster & Railsback, 2003). Their view is that school leaders working in a culture of trust empower teachers and draw out the best in them.

Successful school leaders improve student outcomes in their school through who they are – their values, virtues, dispositions, attributes and competencies – as well as what they do in terms of the strategies they select and the ways in which they adapt their leadership practices to their unique context. The AITSL publications *Australian Professional Standard for Principals and the Leadership Profiles (2014)* and *Leading for impact: Australian guidelines for school leadership development (2017)* refer to the following attributes under the leadership requirement category *Personal qualities, social and interpersonal skills*:

- Emotional intelligence
- Empathy
- Resilience
- Personal wellbeing
- Self-management
- Self-awareness
- Trustworthiness
- Environmental awareness

- Social awareness
- Cognitive capacity
- Openness to feedback

In order for our school to enhance our performance culture, our leaders must exhibit attributes that will enhance levels of trust across the school. The *Principal Performance and Improvement Tool* has building productive relationships as one of the six key leadership practices of effective principals. The literature suggests we can strengthen school culture by listening to staff concerns; encouraging staff to show initiative; expressing interest and care for staff; having honest two-way conversations; showing respect for all members of the community; and being 'out and about' in the school and at school events.

Conclusion

Excellent workplaces make sure that every individual receives continuous feedback on their performance and areas for improvement, both positive and negative. These workplaces also prioritise data over opinion.

As we strive to implement an exemplary performance and development culture across our school, it is particularly important that school and team leaders are trained in how to appraise and provide feedback and to have difficult performance conversations where that is required.

When we establish a peer observation culture, school leaders need to work with staff to agree on protocols and procedures and involve staff in the planning process. School leaders must support staff to provide improvement focused feedback that is based on evidence and early career teachers to learn from more experienced teachers.

Young people who find their own voice in supportive school environments are more likely to develop a confident voice, a capacity to act in the world, and a willingness to lead others. By empowering students, we enhance student engagement and enrich their participation in the classroom, school and community. We help students to 'own' their learning and development, and create a positive climate for learning (Amplify, 2018).

Finally, in order to enhance our performance and development processes at Clarkson where teachers access continuous feedback, we must consider the school climate.

The leadership and culture at the school level determines whether we adhere to policies and run processes to improve outcomes. Hattie (2012) reinforces the notion, "Without a level of trust, teachers will 'close ranks', 'put up shutters' and retreat to the old and tried methods behind a closed classroom door".

Leaders at Clarkson CHS have an obligation to empower teachers and draw out the best of them. Their personal integrity, commitment and honesty establish stronger and more trusting relationships amongst teachers and sustain a school climate where excellence can flourish.

References

Australian Institute for Teaching and School Leadership (2017) *Leading for impact: Australian guidelines for school leadership development*. Retrieved from: <https://www.aitsl.edu.au/docs/default-source/national-policy-framework/leading-for-impact-australian-guidelines-for-school-leadership-development.pdf>

Bill & Melinda Gates Foundation. (2013, January 8). *Measures of effective teaching project releases final research report*. Bill and Melinda Gates Foundation. Retrieved from: <https://www.gatesfoundation.org/Media-Center/Press-Releases/2013/01/Measures-of-Effective-Teaching-Project-Releases-Final-Research-Report>

- Department of Education and Training (2018) *Amplify: empowering students through voice, agency and leadership*. Department of Education and Training Victoria. Retrieved from: <https://www.education.vic.gov.au/Documents/school/teachers/teachingresources/practice/Amplify.pdf>
- Dinham, S. (2011) *Teaching and learning, leadership and professional learning for school improvement*. Presentation 17803, University of Melbourne.
- Hattie, J. (2012) *Visible learning for teachers*. Routledge, London and New York.
- Harris, J., Caldwell, B., & Longmuir, F. (2013) *Literature review: A culture of trust enhances performance*. Australian Institute of Teaching and School Leadership, Melbourne, Victoria.
- Jacob, B.A. & Lefgren, L. (2005). *Principals as agents: Subjective performance measurement in Education* NBER Working Papers 11463, National Bureau of Economic Research, Inc.
- Jensen, B. and Reichl, J. (2012) *Implementing a performance and development framework*. Grattan Institute, Melbourne, Victoria.
- Marshall, G., Cole, C. and Zbar, V. (2012) *Teacher performance and development in Australia: A mapping and analysis of current practice*. Australian Institute for Teaching and School Leadership. Melbourne, Victoria.
- National College for Teaching and Leadership. (2019). Building and sustaining a culture of high performance: the role of the senior leader. Retrieved from: <https://www.nationalcollege.org.uk/cm-mc-ewsm-cs-secondary.pdf>.