



Learning Journey Three

Evaluating Our Impact
at Clarkson Community High
School



*“Know thy impact, spark
the learning and let us all
live the dream”*

*John Hattie and Klaus Zierer,
10 Mindframes for Visible Learning: Teaching for Success*

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Preface

In June, our school held the annual *Clarkson's Got Talent* performance competition directed by Teacher in Charge of Arts, Ryan Thornicroft. In advance of the event, the seventeen acts brainstormed songs, formed groups, twanged bum notes and covered their favourite tracks. The learning throughout the preparation phase was visible and students were keenly aware of how much they had progressed and what they needed to do to improve. The curiosity and motivation to perform successfully on the night was palpable and their performances represented outstanding products of learning. The talent competition exemplifies how Clarkson Community High School (CCHS) students are invited by our school to flourish. Performing on stage or mastering an equation in Maths is a journey and if we create engaging learning environments, sequenced and content-rich programmes; and engaging lessons to encourage student participation, then our students will reach their potential.

Invitational Education Theory underpins our thinking about learning and its I-CORT acronym ensures we are intentionally caring, optimistic, respectful and trustworthy when conducting ourselves around the school community. Consequently, Clarkson staff treat people as individuals and support their needs, even when that is difficult or unappreciated. Our processes are consistent, fair and transparent to encourage and reward participation and engagement. Our policies demonstrably focus on the importance of learning and guarantee fairness and equity for all.

As our school snapshot reveals on the next page, we need to accelerate learning for many of our students who enter high school as achieving at significantly below national minimum literacy and numeracy standards. Our students deserve teachers who think about learning and their own role and demonstrate they are evaluators, change agents and seekers of feedback who are constantly engaged with dialogue and challenge.

A walk around Clarkson Community High School reveals teachers collectively reflecting on their impact to help them fill in the gaps in which they are simply incapable of seeing individually. I see staff striving for challenge and not merely 'doing their best' and classrooms where students are engaged in as much dialogue as monologue. I also see teachers intentionally implementing feedback strategies to develop staff efficacy which in turn makes the learning visible. We prioritise relationship building and trust so that learning can occur in a place where it is safe to make mistakes and learn from others.

Learning Journey Three: Evaluating our Impact at Clarkson Community High School builds upon past Clarkson CHS *Learning Journey* publications to articulate our progress, educational thinking and learning experiences in the form of concise and engaging articles.

John Hattie and Klaus Zierer, 10 Mindframes for Visible Learning: Teaching for Success has provided a research touchstone to guide the content and establish a coherent and powerful journal. Twelve teacher contributors have each selected a mindframe from the text to inspire and shape their teaching and learning story.

I would like to take the opportunity to commend all contributors for their articles. They are committed educators with busy professional and personal lives; and writing an article represents a commitment to their growth and the collective efficacy of our school community. I would also like to thank in particular Jasmita Jeshani for sharing her project management and design expertise to give *Learning Journey Three* its publication standard appearance.

We hope you enjoy *Learning Journey Three* and welcome any feedback to enhance our future publications.

Thomas Jones
Learning Journey Three Editor

Clarkson Community High School 2018: A Snapshot

Clarkson Community High School is located in the Northern outer coastal suburbs of Perth, Western Australia and caters for around 415 students. Residualisation means CCHS is negatively impacted in terms of academic and behavioural outcomes. The school is bounded by three other schools – one 7–12 school, one 7–10 and the 11–12 Senior College that the second school feeds into (See Figure 1). The neighbouring schools have access to coastal suburbs with higher median house prices. This fact, coupled with median household income data from the 2016 census illustrates the socio-economic reality represented in Figure 2. Each neighbouring school is newer than CCHS and has a higher Index of Community Socio-Educational Advantage (ICSEA) (Inder, 2017)¹.

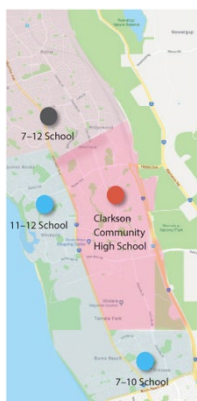


Figure 1

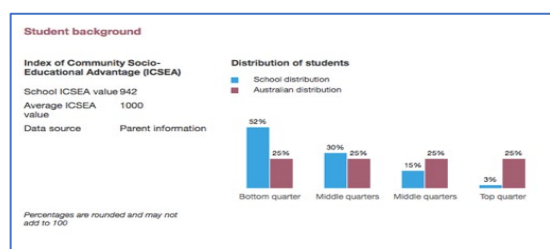


Figure 2

As a result, many of the students entering the school in Year Seven are assessed as achieving at significantly below national minimum standards set by the Australian Curriculum Assessment and Reporting Authority (ACARA). The academic standard our Year 7 entry has an impact that ripples through all years at the school and a profound effect on Clarkson's achievement levels and the learning programs that can be offered in the school.

Students entering our school require engagement and a learning environment that encourages and develops excellence and achievement. Providing this environment requires a significant learning journey.

2018's NAPLAN results reveal a marked improvement compared to our 2017 results represented in Figure 3. Our students, year after year, demonstrate High Achievement for Spelling and in 2018 compared to *Like Schools*, we again demonstrated High Achievement. Despite the students' 2018 Reading skills representing a need for improvement, our students' Grammar and Punctuation; Writing and Numeracy are impressively at *Higher Progress* and *Higher Achievement* compared to *Like Schools*.

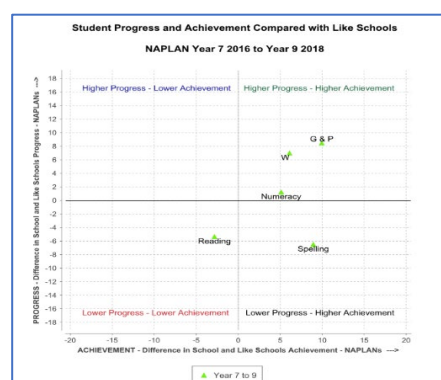


Figure 3

In response to our context, the school leadership team are driving a strong improvement agenda for the school. A high priority is given to the school-wide analysis and discussion of systematically collected data on student outcomes, including academic, attendance and behavioural outcomes, and student wellbeing.

The school is driven by a deep belief that every student is capable of successful learning and our flexible structures and processes are enabling the school to respond appropriately to the needs of individual learners. In 2018, it is paramount all teachers and leaders are committed to identifying, understanding and implementing evidence-based teaching strategies.

¹ Inder, A (2017) Circling the drain: how social segregation further disadvantages those in need. *Education Today*

Know Thy Impact

Dr Steven Laing

Dr Steve Laing welcomed the opportunity to teach part-time at Clarkson CHS in 2018 in his first post-graduation high school teaching role, covering Science and Career and Enterprise in a job-sharing arrangement with Louise Hall. Since 2010 he has also taught at Edith Cowan University in the School of Business and Law, helping undergraduates build the employability and leadership skills that will assist them build their careers. Steve first graduated in 1986 at the University of Edinburgh reading Agricultural Crop Science, thence undertook a PhD in Microbiology completed in 1989. He then took a transferred to a career in commerce, initially as a management consultant with Accenture, then in senior IT management roles in the City of London, prior to emigrating to Australia in 2003, where he took the opportunity to run his own business in vehicle retail for 10 years. During this period, he recognised his vocation, whether as a supervisor, manager, or business owner, was developing the capabilities of people within his area of responsibility leading to his career in education.



According to the Greek writer Pausanias, on the forecourt at the Temple of Apollo at Delphi in Greece was inscribed the, now translated and oft-repeated, maxim, “Know thyself”. The better you understand who you are; your aspirations and motivations; the values that shape motivations, both negative and positive; and the unique talents you possess; the more able you will be to navigate the key aspects of your life (your health, career and relationships) in a manner more sympathetic to your internal priorities. And as such will also help you determine the skills worth investing resources in toward achieving those outcomes (Jackson & Hill, 2009). The importance of developing such self-knowledge is increasingly recognised in business (Carlopio & Andrewartha, 2008), and is a key component to what I teach to business undergraduates in my other job.

So, the neat paraphrasing of the first mindframe of “I am an evaluator of my impact on student learning” as *know thy impact*, immediately struck a chord. This attitude of reflection and assessment is rightly recognised by Hattie and Zierer (2018) as “by far the most important of all mindframes”, and given the loftiness of such a statement, it is certainly worth dwelling on.

As a recently graduated teacher, perhaps the most repeated mantra heard from lecturers was the importance of post-lesson reflection: “What went well?”; “What could be improved?”; and so on. However, as Hattie and Zierer contest, does this in itself provide enough evidence that the lesson actually achieved its objective? At Clarkson it would be all too easy to consider a class a success where one got through the entire planned lesson without too many interruptions, or where all the final lesson review questions were answered

correctly. However, the *final proof* is summative test results, though by this point, if thy impact has been less than appropriate, the opportunity to correct has well and truly left the building.

Based on meta-analysis, Hattie and Zierer (2018) detail two key suggestions. The first is formative evaluation, the second is intervention. Over the last few months I’ve had the opportunity to implement strategies using both, and I’d like to share both *my impact* but also *my knowledge* of the size of it. It is key to understand that this impact is based on data largely qualitative with respect to formative evaluation, but quantitative regarding intervention. It is also worth remembering that as a new teacher I’m still very much in the trial-and-error phase (with errors still significantly outweighing successes!), but also that I am fortunate to teach two Year 9 classes that have morphed in somewhat different directions in respect to their classroom behaviour. This has allowed me to more easily measure relative success, and more than once has provided a handbrake to me rushing to an incorrect conclusion.

Formative evaluation

Formative evaluation is essentially any evaluation that takes place during the teaching of a unit of work prior to the final summative evaluation (O’Donoghue, 2017) with the benefit that information gathered from such can be fed back to the students in a timely enough manner to allow appropriate adjustment and correction prior to the provision of the final mark. It is hence very closely tied with the concept of intervention, whereby formative data allows early recognition of problems and thence targeted adjustment to the teaching of individuals, groups or the entire class. Whilst checking-in with our students’ understanding is undertaken regularly in class, whether through direct questioning, individual whiteboards,

quizzes, or similar checks, my personal observations suggest that such positive signs of knowledge displayed in class never quite seem to manifest as strongly in summative testing. However, for the purposes of this article, rather than explore improving formative assessment undertaken during teaching of a unit, I'd like to share some experience focused on formative testing carried out at the start of the unit. Usually such testing checks whether material taught in previous years has been retained, and/or whether students have prior knowledge of the content due to be taught, and how the collection of such data can help improve my impact.

Pre-unit formative testing

Designing an effective pre-unit formative evaluation is trickier than it first appears. Most students will be unable to correctly answer questions on material as yet untaught, and the likelihood of remembering content taught perhaps a year ago might lead to an entire task that quickly appears impossible to the student and thus not properly attempted, providing very limited useful insight at all. Opening with some easy questions, and scattering a few that aren't too hard, or at least guessable seems to encourage participation. Finally, I've also found it valuable to finish with some questions about student attitude – what they hope to achieve in that unit (and I keep that purposefully vague), and what they will need to do in order to attain such. (As an aside, in my next pre-unit formative test, I will ask them what they'd like ME to do, to help them achieve the result they want – and that could be very interesting.)

Prior to handing out the test, I've found it useful to remind students why we are doing it, and importantly for the students, that the results aren't part of any reporting mechanism. 20-30 minutes is an appropriate time, and it is worth observing how they students approach the task, even when they know it won't be "scored". Who starts but soon gives up; who asks for help; who is happy to make mistakes; who is determined to finish; and even who is prepared to resort to Googling answers on their phone! All highly useful information. With a few minutes to go, I check to ensure that everyone has answered the final *attitude* questions (these need to be non-negotiable so I make them an exit task to prevent dithering).

What we now have are two things that should help us teach the unit. Indicators of ability and attitude that will help shape how to teach the unit (as well as any special consideration we need for particular students); and a baseline of each student's content knowledge. As part of the end of unit revision process, prior to final summative testing, the aim will be to give the students the test again. As they finish, they will be handed back their original test-paper so they can personally observe what they have learned and retained so far, or otherwise. The value in being able to show students (particularly those whose belief in their own capability seems poor) that they have improved should be a useful pre-test motivator, especially if they are quietly reminded of their original objectives.

Intervention

But what about intervention? The critical part is recognising where it needs to occur, and for this data gathering and analysis is essential. It goes without saying that our best quality data *should* be test results. On an individual student basis, these give us our indicators of competence, but it is also worth looking at the data collectively as well as individually. During term one the Year 9 students were tested on plate tectonics. Putting each answer for each student into a spreadsheet, and then averaging the score for each question (divided by the possible marks for each specific question), was highly revealing. As expected, more difficult questions had lower averages, but so did some apparently easy ones. One such example was a question that required production of a graph, a task commonly undertaken in science inquiries, and a skill usually attached to test questions in most science units with numerous marks available. In this test, most students had done relatively poorly, so during the teaching of the next unit, I took the opportunity to carry out an intervention, developing a lesson specifically focused on graphing skills, though in the context of the new unit. Each aspect of the graph was dissected – title, axis labels, type of graph etc – and then students were given focused tasks to develop these skills. The marks for the graph question in the next unit test are shown below, and whilst there may be some reasons for difference based on content, a significant portion is due to the intervention focusing on those specific skills needing developed.

	Test 1	Test 2
Class 2	48%	68%
Class 3	47%	76%

Fig 1. Average score for a graph-based question as a percentage of total marks for two tests; test 1 - prior to intervention, test 2 - post-intervention.

This can be further highlighted when marks for that question are compared to those of another class where the intervention was not undertaken, suggesting improvement was not simply due to increased exposure to graphing through normal content teaching.

	Class	Average mark for question
No intervention	1	43%
Intervention	2	68%
Intervention	3	76%

Fig 2. Average score for graph-based question as a percentage of total marks for that question.

The results of the intervention seem fairly conclusive, but it is important to note that the key factor isn't necessarily the quality of the intervention, but in using your data to identify where such opportunities exist. Moreover, where you do identify such discrepancies between cohorts, these should highlight areas for discussion with your colleagues as to why one class performed significantly differently than another. What teaching processes or resources were used? Could this intervention be replicated at a later stage? *Knowing thy impact* includes recognising that another's impact might be significantly more effective, such that there is a real opportunity to learn from it.

The key is to look at your data more closely. Slice it and dice it. Join it with the data from others, and look at similarities and differences, and try and work out what it is telling you. It may just be that a question that was generally failed may simply have been badly written; alternatively, it might highlight a common misconception that your teaching approach is not effectively addressing. Perhaps even use the data to highlight the students that did comprehend and talk to them and see if you can determine what helped them build their understanding. The more standardised data collected, the more useful it is, so share your pre-unit tests, collect the data from your

Kahoot sessions, and use it to try and correct those issues and misunderstandings BEFORE the fat lady sings at the end of unit test.

The blind-self

A final critical component of building self-awareness, of which *knowing thy impact* is definitely a subset, is that there is a natural limit to personal self-reflection. No matter how hard we try, seeing ourselves as others see us isn't straightforward. Admit it or not, we all have this *blind side*. This is one reason that collecting data is so important. Unlike people, data has no ego that it feels compelled to try to protect.

It is why it is important to help colleagues as well as students by highlighting areas we can improve. But it is probably even more important to realise that our *blind self* can also fail to recognise what we are inherently good at. It is often hard to recognise these extraordinary abilities, our *talents*, because as they've always been part of who we are, we often fail to properly recognise them, and the impact they can have. It is why it is so important to tell those with ability that they have them – whilst you might think that it is surely obvious, remember that to them it quite possibly isn't. The feedback sandwich isn't just about providing the spoonful of sugar to help the medicine go down, that sugar is a key component of building the self-awareness of the recipient.

Wrapping up

In conclusion, knowing one's impact is predicated on collecting and assessing data; reflecting on its meaning; putting in appropriate interventions based on such; and then evaluating the impact based on collecting more data. And like all good processes, it's a circular one. But it is also recognising that building capability in both educators and students cannot be done alone – by our very human nature, we cannot fully measure our own impact, and we require others to help fill in the gaps that we are simply incapable of seeing. Use your data, use your team, and build your impact, as well as the capability of your students.

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Our Growing Awareness of Impact

Thomas Jones

Thomas Jones is Head of Learning Area of English and HaSS, occasional Acting Deputy Principal and Level Three Classroom Teacher at Clarkson Community High School. Thomas is in his eleventh year of teaching, having started his career teaching in South Korea and London. He takes a keen interest in topics relating to Professional Learning Communities (PLC) and champions the importance of ensuring all students have equal opportunities to learn. In 2018, he achieved the Masters of School Leadership degree at the University of Western Australia and Accredited Coach qualification at Growth Coaching International (CGI).



Our core business in English and HASS is to evaluate our impact. This is by far the most important of all the mindframes and dominates as the major message from the Visible Learning research. According to Hattie and Zierer (2018), to gain *more than a year's growth for a year's input*, a community of teachers must foster the collective belief to overcome any *barriers and limitations* in meeting their student growth goals. This collaborative approach or a high collective efficacy notably matters most in raising student achievement (Eells, 2011).

In 2018, we are increasingly conscious of the role collective data analysis plays when making decisions about how we can raise achievement levels. Although opinion has credence, opinion is not enough to galvanise our learning area's improvement agenda.

Evidence-based improvement is central to our thinking at Clarkson because as Professor John Hattie says,

"Without data you merely have opinion!"

Semester One Data Analysis

In Semester One, Clarkson CHS continued to prioritise the school-wide analysis and discussion of systematically collected data on student achievement outcomes - a feature of *Outstanding* on the *National School Improvement Tool's* performance measure. In response, our data analysis in the English and HaSS Learning Area considers evidence of improvement or regression over time; performances in comparison with similar schools; and, in the case of data from NAPLAN and OLNA, measures of growth across the years of school.

Throughout the school, we employ the Five Week Data Analysis Cycle to provide timely information about our current progress and to ensure that we have the

information we need to adapt our teaching systems and practices to produce the best outcomes for our students. Our five-week data sharing cycle also enables Heads of Learning Area to meet and share data collected in each learning area to coordinate action that will improve outcomes for all our students

After Data Review Point Four in Term Two, the team convened to create collective SMART goals to accelerate student performance which represented the English and HaSS teachers ever-increasing awareness of their impact. I also shared individual data packages with all team members and ran follow-up coaching conversations to explore how the data challenged and/or reinforced their beliefs and opinions about their classes. I was impressed with the conversations and language, which reflected a sophisticated understanding of student assessment and data concepts (e.g., value-added; growth; improvement; statistical significance).

Year 8 English grading represented in **Figure 1**, became more comparable as we saw a more realistic number of A and B grades and fewer D and E grades. In April, I challenged the HaSS team to reduce the number of E grades after Data Review Point Two. In response, the team engaged more with graphic organisers, worked examples and raised expectations with assessment submission and completion.

Student Analysis Tools

We also observed the English Average Variation in Rank (AVR) strengthening in Term Two. AVR represents the relationship between students' NAPLAN performance and students' school assessment performance.

The AVR index in Year 9 English decreased by -1.3 index points which indicated our grading became more aligned to SCSA curriculum

YEAR 8 SUMMARY							
	Time	A	B	C	D	E	NA
Review 1	Term 1, Week 5	15	33	14	12	14	3
Review 2	Term 1, Week 10	7	12	29	25	12	2
Review 3	Term 2, Week 5	5	8	29	26	16	3
Review 4	Term 2, Week 10	8	6	34	23	12	4
Review 5	Term 3, Week 5						
Review 6	Term 3, Week 10						
Review 7	Term 4, Week 5						
Review 8	Term 4, Week 10						

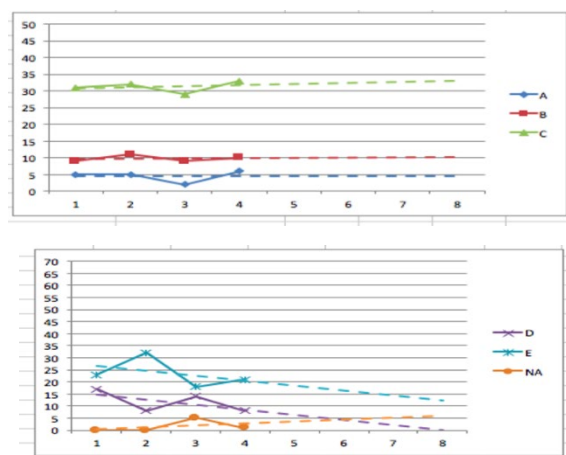
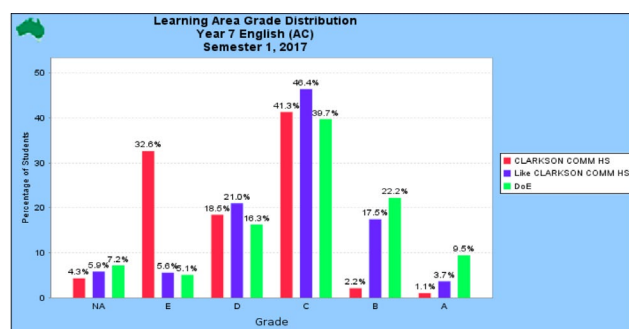


Figure 1

It was also useful to reflect on our data compared to this same time last year. Student Achievement Information System (SAIS) represented in **Figure 2**, revealed 32% of the cohort were achieving an E compared to *Like Schools* at 5.6% for Semester One Year 7. As we headed into Semester Two, only 9% of our Year 7 cohort were on E grades and an improved 15% of students were on a B grade. We saw this trend throughout Year 7 – 10 in both English and HaSS.

Figure 2



The data driven discourse also generates conversation about how more effective moderation processes will increase our marking comparability. Cross marking, WACE

grid marking, desktop auditing and double blind marking are now delivered systematically across the learning area.

A Growing Awareness of Impact

The Five Week Data Cycle enables us to accurately know where we are, set SMART goals and improve our practice collectively. Our Principal John Young shares his perspective on data and school improvement in his 2016 *Education Today* article.

“At Clarkson, the culture is that accountability for improvement centred on data is seen as being neither punitive nor judgemental in relation to teacher efficacy and school leadership, but as a needs assessment for carefully targeted interventions to improve teachers’ and leaders’ effectiveness over time”.

Our collective efficacy and increasing awareness of impact has enabled us to further course of the learning process. As we progress in Semester Two, can we draw better conclusions from the data to Respond to Intervention (RTI)? In addition, instead of focusing solely on the grade, what if we evaluated rates of learning growth for each student. The excerpt from an article by *The Grattan Institute’s* Peter Goss and Jordana Hunter (2015) illustrated the need to evaluate progress rather than achievement and will influence our thinking in Semester Two.

“Rather than just hoping for a great end-of-year result, we should focus on the progress we want students to make. Every school should track the learning of each student, using robust and precise measures, and include it clearly in report cards along with current achievement. Parents have a right to know how much their child has learnt.

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Data and Equity Make Learning Visible: An Invitational Road Map

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 and is a member of the Board of Trustees for the International Alliance for Invitational Education. This article was published in Education Today in Term Two, 2018.



John Young, Principal of Clarkson Community High School, has seen the difference visible learning makes

“We, too, have a dream for developing passion in learning and developing an education system that values inviting all students to come and learn, to belong, and to reinvest in their own learning.” Hattie & Zierer, 2018, (p. 167)

Making learning visible within an invitational framework is central to school improvement CCHS in Western Australia. Overcoming inequalities associated with the Index for Community and Socio-Educational Advantage (ICSEA) and associated background factors of disadvantage, has provided a challenging context for school improvement and reform. An emphasis on research and data has focused teachers’ attention on the why, how and what of accelerating student learning.

At CCHS the importance of data and equity when making learning visible is always contained within an unconditional circle of intentional respect, trust, optimism and care. At Clarkson the faculty and staff recognise that each student is unique. Each student is able, valuable and responsible and is treated accordingly.

Our school is always concerned with the broad array of real life factors in the ecosystem of each student. Test scores and evaluations on standardised tests are secondary to developing decent, healthy, and productive citizens. As Nel Noddings said, “The secret of school success is caring teachers who know what they’re doing and have time to do it.” William Purkey, John Novak and Betty Siegel’s work on Invitational Learning Theory recognises that it is the people who breathe life into a school and make it flourish. When people in a school use

positive psychology underpinned by self-concept theory, school climate is optimised, and school culture inexorably improves.

In a related way, Hattie’s mindframes in Visible Learning (2009) determined collective teacher efficacy is one of the highest impact factors on student learning (effect size: 1.57). Another high impact factor on learning is feedback (effect size: 0.73).

Invitational Education Theory illustrates the power of intentionality in sending messages of care, trust, respect and optimism to others. Hattie and Zierer (2018) believe teacher success is the practice and continual refinement of ten behaviours or mindframes. The effective analysis of data measures teacher impact and makes professional reflective practice meaningful.

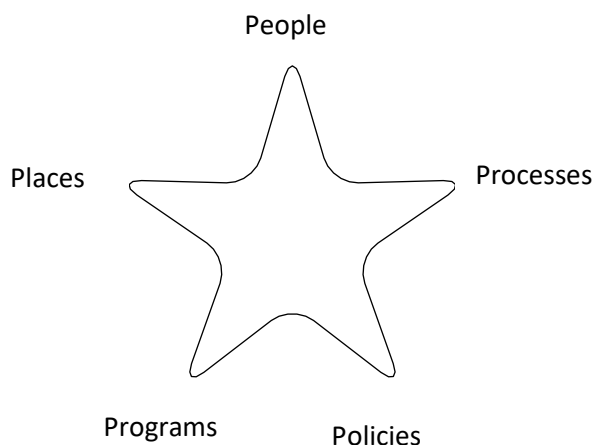
At CCHS, performance management and line management are based on more than setting targets and giving feedback. Moreover, the alignment of both teamwork and individual goals are focused in the same direction and drive the momentum for individual change.

Leadership focuses on feedback to teachers that impact student learning. Feedback has a positive impact on students and applying feedback to teachers produces positive impact on teacher learning. Teachers are constantly engaged in conversations about building student capacity improving their professional capital.

At Clarkson in 2018, professional learning is central to improving teacher expertise by encouraging passion and enthusiasm for teachers to have positive impact and the data to demonstrate ever-improving competence and proficiency. Professional learning for teachers improves cognisance of the mindframes, the behaviours defined

by Hattie and Zierer. Teachers need to intentionally adopt these mindframes to maximize student success and accelerate learning. Inexorably the data must ‘talk’.

It is pivotal that a focus on the systematic analyses of student data is made in a conscious effort to identify and better understand the why, how and what of accelerated learning.



Hence at Clarkson an important Process means teachers are encouraged to learn from each student’s improvements in National Assessment Program Literacy and Numeracy (NAPLAN) and Online Literacy and Numeracy Assessment (OLNA). The starfish illustration developed by William Purkey represents the five domains of Invitational Learning Theory and Practice. It represents in a very simple way the complexity of options at any point in time. Although not included in the illustration, a sixth ‘P’, Pressure, creates change by employing different combinations of the other five domains. The goal is to ensure a year’s worth of learning for a year’s worth of teaching.

Teachers have ever-increasing awareness of their impact due to the 5-week data review, line management and performance management processes. The data analysis cycle gives an opportunity for prompt, effective change. Sharing data across learning areas each fifth week fosters collaboration and strengthens professional capital by focusing on increasingly effective interventions.

Learning is made increasingly visible for both teachers and students because: (i) feedback uses familiar language that is clear and concise: (ii) feedback is explicitly monitored, and (iii) feedback clearly articulates clear, progressive steps to accelerate student learning. The OLNA Test results for CCHS provide a guide to student achievement over time. It is a credible, value-add metric that is based on a matched cohort from

NAPLAN to OLNA. The West Australian Certificate of Education (WACE) mandates students must demonstrate competency in literacy and numeracy.

Students who achieve a Band 8 in NAPLAN automatically have demonstrated competency and do not have to sit OLNA. All other students must pass OLNA in Year 10, 11 or 12 and achieve a 3 in each assessment with results scaled 1-3. The 2017 results for CCHS are presented in Data provide insights that help to equip teachers to better understand the mindsets of students. Teachers’ understanding of the relationship between data and equity is fundamental when attempting to maximize their classroom impact.

Compared to Like Schools (22 schools total)
Numeracy: 1st in growth (22nd to 15th from 2014 to 2017)
Reading: 3rd in growth (21st to 16th from 2014 to 2017)
Writing: 1st in growth (16th to 9th from 2014 to 2017)
Compared to all of Western Australia (188 schools total)
Numeracy: tied 3rd in growth (tied 180th to 167th from 2014 to 2017)
Reading: 12th in growth (tied 177th to tied 162nd from 2014 to 2017)
Writing: tied 8th in growth (tied 157th to 122nd from 2014 to 2017)
Average percentage growth across all strands: 11th in the state.

Teachers at Clarkson Community High School understand that all Australians need a fair go and that education is a pathway out of disadvantage.

Invitational Learning Theory and the Visible Learning mindframes are each concerned with the thinking required to accelerate learning, overcome disadvantage, and maximize impact. Good teachers employ effective strategies by adopting mindframes to invite student involvement.

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Collaboration as a Tool for Evaluating Progress and Impact

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 who maintains 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.



This mindframe highlights the importance of collaboration in determining progress and impact (Hattie & Zierer, 2018). Maslow's Hierarchy of Needs links safety, belonging and a sense of connectedness with motivation in people. Revising upon what motivates and creates successful people is at the core of understanding the importance of collaboration to determine impact. Hattie and Zierer (2018) considers collective efficacy to enhance confidence and overcome barriers (Hattie & Zierer, 2018). These barriers can include self-fulfilling prophecies about student abilities and achievement (McLeod, 2007). With effective collaboration, the belief that students can gain more than a year's growth for a year's input becomes visible (Hattie & Zierer, 2018).

Maslow's Hierarchy of Needs

Why do successful people enter into a dialogue and try to solve their problems by cooperating with others?

Needs are organised into hierarchies, which are dependent on the prior satisfaction of another. If these needs are not satisfied the person will become dominated by the physiological needs, consequently, all other needs may be pushed aside (McLeod, 2007). A student's ability to learn new things and progress may be hindered if they do not have effective role models that meet these needs themselves.

Maslow notes that children want a predictable order; injustices, unfairness or inconsistency can make a child feel anxious and unsafe (McLeod, 2007). In order to navigate this through collaboration, it is important to consider the students' primary need of safety. Creating a safe environment where all students feel invited to learn

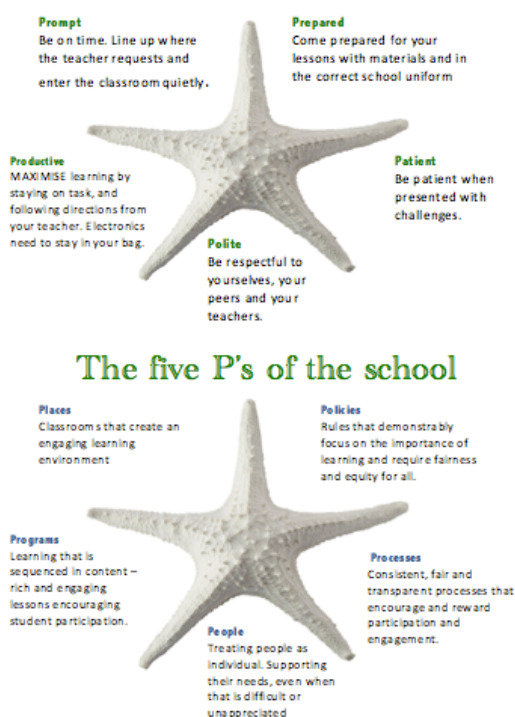
can minimise student anxiety and optimise progress and impact (Hattie & Zierer, 2018).

Along with safety comes a need to belong and this is true for every individual. If departments of teachers are not taking the steps to feel they belong and have a cohesive team, then they will not be able to as effectively assess their impact. Maslow notes that, to develop self-esteem and self-actualisation, these needs need to be met first and foremost. This is applicable to both teachers and students (McLeod, 2007). In Visual Arts, a student whose primary needs are satisfied has more opportunity for creativeness (McLeod, 2007). Expertise in teaching is achieved through collaboration as it develops safety and connectedness.

To create a classroom with a predictable order, it is important to have clear rules and routines that encourage positive engagement. The first five P's outline to the students what will be required of them each lesson and the teacher's expectations.

The five P's of the school was included in their rules to show students that teachers too have expectations of themselves to ultimately meet each individual student's needs. It is important to include students in what successful impact looks like from the outset (Mindframe 8). This way, students will feel that it is a safe environment where their needs are considered. Giving students insight into the five P's that Clarkson adopts

will create a collaborative climate at the school to help students reach 'self-actualisation' (McLeod, 2007).



What is collective efficacy?

Collective efficacy is how teachers collectively think about their impact and student progress. This has an effect size of 1.23 on student achievement in comparison to the average of 0.4, one year's growth for one year's input. Teachers need the ability to overcome barriers and limitations and hold the belief that all students can gain more than a year's growth for a year's input (Hattie & Zierer, 2018). To make a difference, teachers will collectively need to have confidence and have high expectations. In schools where teachers find ways to address learning and behaviour issues, students benefit. This has been most beneficial through professional development, which has a large effect size of 0.62. Teachers working together to understand and evaluate their impact characterize effective professional development programs (Hattie & Zierer, 2018).

Similarly in classrooms, effective teachers encourage a sense of collective efficacy for the students. Encouraging group work and overcoming obstacles is nothing new for people, which is why teacher are encouraged to work together to resolve and assess issues.

Collective efficacy can be an effective tool to break away implicit bias and self-fulfilling prophecies. Implicit bias can arise from subconscious associations (Suttie, 2016).

This can lead to self-fulfilling prophecies whereby the student begins to morph into their negative association due to the interactions between them and the teacher (Suttie, 2016). Teachers who believe that students have the ability to succeed will find a way for students to succeed in their class (Purkey & Novak, 2008).

Collaborating with peers and discussing effective strategies for certain students can help to change these self-fulfilling prophecies and build a positive culture in the school.

The belief that students can gain more than a year's growth for a year's input can provide the impetus for this positive climate in a school (Hattie & Zierer, 2018). To collectively assess progress and impact it is prudent that teachers collectively focus on the use of student outcome data. Analysing student data acts as a means to target refinements to teaching behaviours and routines (cited in Hayes & Noonan, n.d). Having this focus not only makes teachers responsible for all students, but also makes them participate in problem solving processes to change student outcomes. This approach builds a collective purpose and places teachers in problem-solving processes to ensure that a collective wisdom is obtained and directed (cited in Hayes &

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Are Percentages and Grades Enough?

Adam Inder

An alumnus of the Teach for Australia “Leadership Development Program”, Adam Inder began his teaching journey in 2015 at Balga Senior High School - the school with the lowest ICSEA in metropolitan Western Australia - as a Mathematics & Science teacher. As of 2018, Adam is the Head of Mathematics & Science at Clarkson Community High School. He is passionate about equity and high-quality education, with his own goal echoing the vision of Teach for Australia – to play a part in eliminating socioeconomic disadvantage. His passion about these topics and his willingness to contribute to educational discourse are evidenced in his 2017 TEDxUWA talk, [“Drawing the line on educational disadvantage”](#) and his multiple articles featured in national magazines Education Today and Australian Educational Leader.



In their book, 10 Mindframes for Visible Learning, John Hattie & Klaus Zierer state that “learning has a lot to do with perspectives” (Hattie & Zierer 2018) – when we discuss learning within a school context, this is expressed to include the perspectives of teachers, parents & carers, and also the learner themselves. Invitational Theory refers to “perspectives” as “perceptions”, stating that “each individual behaves according to how the world appears at that instant. From this vantage point, there is no such thing as illogical behaviour – each person is behaving in the way that makes the most sense to him or her at a particular moment” (Purkey & Siegel 2013).

As a classroom teacher, I regularly engage with students with negative perceptions/perspectives in relation to learning. I have had multiple conversations with students in my classes about why they refuse to attempt work. The common refrain is that the work is ‘too hard’ or that ‘[they are] going to fail anyway’ so there is no point in trying. This indicates a perception towards learning that is resistant to challenge and indicates a fear of failure. “What we choose to perceive is determined by past experiences as mediated by present purposes and future expectations,” which means there are root causes for any student’s negative perceptions towards learning. These causes often come in the form of experiences of failure without being given the tools to best tackle the situation. These self-driven perceptions can be further exacerbated by a parent being emotionally abusive at home, a poor classroom culture or a teacher using disinviting language. For teachers, parents and learners themselves to believe that students can improve, they must have the right mindsets and the

correct understandings about what impacts learning and what learning actually looks like.

Our beliefs about whether or not a student can improve and consequently, our expectations for a student’s level of achievement help to shape their level of success, for better or worse. Indirectly and directly, intentionally or unintentionally, our words and actions create and then reinforce the expectations we have for our students – both as individuals and as a collective. When we discuss teacher expectations of students, one quotation from ACER’s Geoff Masters comes to mind: “The least advanced students struggle. They begin the year on track to receive low grades, often year after year. The best predictor of where students will be relative to their age peers in the later years of school is where they were in the earlier years. Worse, students who receive a “D” year after year are given little sense of the absolute progress they are making. They often conclude that there is something stable about their ability to learn – they are a “D-student” – and eventually disengage.” (Masters 2018)

This quotation alludes to the frustration associated with how we define success within our education system. Too often, the grade we must assign students with becomes a stamp that defines their level of success, as poorly misplaced as this may be. The work of people like Peter Goss from The Grattan Institute points towards a greater emphasis needed on progress rather than achievement. His article with Jordana Hunter sums up the future of education succinctly: “Rather than just hoping for a great end-of-year result, we should focus on the

precise measures, and include it clearly in report cards along with current achievement. Parents have a right to know how much their child has learnt.” (Goss & Hunter 2015)

In the Mathematics & Science learning areas at Clarkson CHS, we understand the value of investigating progress over achievement as we develop a culture of Growth Mindset within our classrooms. Growth mindset is a perception which states that effort is linked to intelligence (Dweck 2006). Research confirms this, although it is counter to the “natural” response for many students and their families (Dweck 2006). The implementation of the [Maths Pathway](#) teaching & learning platform has allowed our Year 7 Maths teachers

to focus discussions around growth, targeting each student’s areas of need and celebrating the gains they make on a regular basis while providing targeted feedback on the areas not yet mastered. By having individualised discussions with a focus on progress over achievement, we tell every student, regardless of their current level of achievement, that we have expectations for their growth. To date, our current Year 7 cohort is experiencing an average growth rate of 135%, which indicates approximately 1.3 years’ worth of growth for every one year of instruction on average. As the year has progressed and we have rolled out Maths Pathway, we have experienced staggering positive deviance within the cohort when assessing using curriculum-based grading systems.

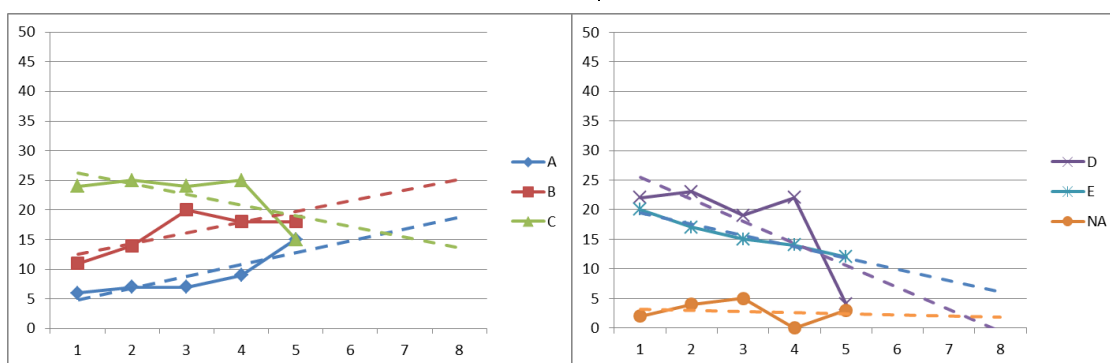


Figure 1: A-C grades (left) & D, E & NA grades (right) for 2018’s Year 7 cohort every 5 weeks (with trend lines)

So, to summarise, the more we moved away from the use of mainstream grading within our classroom discussions, choosing to focus more on growth and mastery-based learning, we actually improved the grades! By changing our words to focus more on growth, and by changing our actions to provide assessments and feedback more in line with progress, we changed the tone of our classrooms to reflect high (but realistic) expectations for every student – and they are rising to the challenge! If we shift our own perceptions towards

growth, indicating that growth is possible through effort and that intelligence is not fixed, we begin to see gradual shifts in the perceptions of the students themselves. In other words, growth mindset needs to be modelled by teachers in order to improve the willingness of students to adopt a growth mindset.

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I Strive for Challenge and Not Merely 'Doing Your Best'

Dr Sonja Jakob

Dr Sonja Jakob is in her first year of teaching at Clarkson Community High School. Before she started her teaching career, she completed a PhD in Plant Sciences and worked as a research scientist. During her PhD at the University of Western Australia, she had the opportunity to teach undergraduate students and developed a passion for teaching. Her interest in science and her strong desire to share her knowledge and work with young people motivated her to change careers and complete a Graduate Diploma of Teaching.



strive for challenge and not merely “doing your best”

Thinking that “doing your best” is not good enough seems a bit daunting, but as Hattie and Zierer explain in Chapter 5 of their book *10 Mindframes for Visible Learning: Teaching for Success* (Hattie & Zierer, 2018), it is about the joy a learner experiences “when his or her effort and hard work is followed by success”. As teachers, we are responsible to create the conditions that allow each and every student to succeed when facing challenging tasks.

It may not seem obvious at first why *mastering challenges* is better than *doing your best*. For me, the difference relates to developing a growth mindset in students. Instead of thinking that they cannot do it and will never be able to do it, students should think that they will be able to master challenges if they persist. Instead of shying away from tasks that are difficult, students should be keen to “give it a go”. Instead of fearing failure, they should accept that they may not always be able to complete the work without problems and struggles. The belief that intelligence is not fixed and can be developed (i.e. growth mindset) has been shown to be a reliable predictor of academic achievement (Claro, Paunesku & Dweck, 2016).

As a teacher, we may be reluctant to challenge our students as we want to avoid frustration - because when our students are out of their comfort zone, it usually means that we are out of our comfort zone. Therefore, a number of important factors should be considered when applying *Mindframe 5* in our classrooms. According to Hattie and Zierer (2018), the most important factors

relevant to creating appropriately challenging learning activities relate to teacher clarity (i.e. what and how content is taught) and goals (i.e. where is each student at and where does he/she have to go). Furthermore, it is critical to develop a flow in the lesson, which means that students are deeply involved in the learning activity, have a sense of control and believe that they can achieve success (Csíkszentmihályi, 2008). A prerequisite for flow in a lesson is, however, that the learning task is not too difficult and not too boring.

Lessons from a novice teacher

As a recent graduate, my teaching experience in secondary school is still limited. Before my Graduate Diploma, I taught various subjects at university in the role of a tutor or laboratory demonstrator. Because of my background, I do not find it difficult to think of challenging tasks that demand higher order thinking and problem-solving skills from my student but the challenges for me were (and still are) to provide students with the right amount of instructions so they are able to complete the tasks. I therefore fully agree with Hattie and Zierer (2018) when they state that teacher clarity is a determining factor for the success of challenging learning activities. It is important to explicitly teach students what they have to know and show them how to do things before asking them to do the tasks. When planning lessons - especially when the lesson involves particularly challenging tasks, I employ the *I do, we do, you do* strategy of explicit instruction (Archer & Hughes, 2010). I explain the context, purpose and goal of a learning activity and give examples or show how it should be done. I then ask the students to

help me with a second example and only then ask them to complete the task by themselves or in small groups.

Striving for challenge in a challenging environment

Challenging activities should be rewarding for students and bring them joy when they master the challenge. For this to happen, the challenges need to be *just right* for the students and fall within the narrow space between *too easy* and *too boring* (following the Goldilock's Principle). It can be particularly challenging to find this space at Clarkson Community High School, where a significant fraction of the students in any class have low levels of literacy and numeracy. This does not mean that they should be excluded from challenging tasks, but it means that the tasks must be designed in a way that allows those students to complete them without the additional challenges of low literacy and numeracy.

An example of a successful challenge

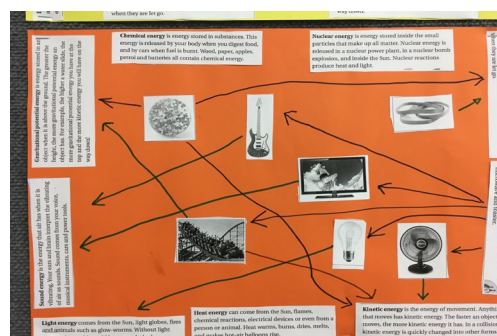
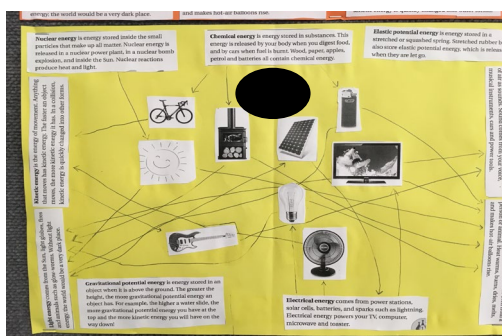
During the second lesson of a new topic on *Energy and Energy Transformations*, I asked my Year 8 students to make a poster that shows energy transformations. In the first lesson, the different types of energy were discussed, and the students saw a variety of images that illustrated the different types of energy. Those same pictures were also used in the second lesson, but the students had to decide what type of energy was used or present before it was transformed into different types of energy. They had to use arrows to connect the first type of energy (or the source of energy) to the images and then a second arrow to indicate the type of energy that was released. The activity was challenging because the students had to apply their limited understanding of the types of energy to the new context of energy transformations, which meant that they had to relate and integrate their knowledge while developing a deeper understanding.

However, to ensure that every student knew how to start, I was very clear about the structure of the poster and gave them a number of examples (teacher clarity). During the activity, I was able to guide the thinking of my students without giving them the answers and was able to support the students who needed extra help. I also had the chance to give each and every student feedback. The students were encouraged to discuss their ideas with other students and to get ideas from other students. Because they were able to select the images that they found the most interesting, every poster was unique. The only requirement was to connect each type of energy to at least one image (goal clarity and learning success).

The figure below shows two examples of the posters. One poster is from a student with high levels of literacy and one poster is from a student with low levels of literacy. It was extremely rewarding to see that students were able to master the challenging task despite low levels of literacy, as they were not required to read or write much but were still required to interpret conceptual information. It was also interesting to see that many of the students with low literacy were deeply involved and were able to show mastery without the impairments caused by their literacy levels.

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Feedback as a Focus: Intentional Mindframes

Louise Hall and Adam Inder

Louise Hall is currently a Science and Career and Enterprise teacher at Clarkson Community High School. After working in the UK at a qualified teacher, Louise joined the school in 2017 and became Year 8 and 10 Coordinator. During 2018, Louise applied and succeeded in completing Stage One of the Level 3 Classroom Teacher program and is currently working to complete Stage Two later this spring. This article was published in Education Today in Term Three, 2018.



Invitational Education Theory seeks to “provide a means of intentionally summoning people to realise their relatively boundless potential in all areas of worthwhile human endeavour” (Purkey & Novak 2015). Such a bold task can appear daunting, but the complexity is made simple (‘simplicity’) through the compelling framework of Invitational Education. Embedded within the framework are five ‘Elements’ – areas of focus which detail what it means to have an inviting approach towards oneself and others. These elements are intentionality, care, optimism, respect and trust – often collectively abbreviated as I-CORT.

Embedding the elements of I-CORT into one’s operation as a teacher may seem like common sense to some; wielding one or more of these elements within the classroom may even come naturally to you. The key behind an invitational stance is that it is most effective when it is intentional, which is why intentionality precedes the rest of the elements of Invitational Theory. Purkey & Novak state that “intentionality can be a tremendous asset for educators and others in the helping professions, for it is a constant reminder of what is truly important in human service” (Purkey & Novak 2015). To be ‘nice’ or to be ‘friendly’ is not what it means to be I-CORT – to take I-CORT as a simple concept rather than a ‘simplex’ concept can be a mistake which leads to a lack of effectiveness.

The main idea of John Hattie’s research on Visible Learning is ‘Know thy impact!’ (Hattie 2012), which refers to teachers regularly understanding the effect they are having on students depending on their approach to teaching and learning. Ultimately, it is the combination of teachers wielding appropriate Mindframes with appropriate actions that result in improved effectiveness as a teacher. When students are asked to name a teacher who has had the most impact, they typically make reference to a teacher who cared or believed in them. The presence of care, optimism, respect and trust within the classroom are precursors for learning, as indicated by positive teacher-student relationships having an effect size of 0.72, which

is double the impact of the ‘hinge point’ effect size of 0.40 (Hattie 2012). One of Hattie’s Mindframes explicitly identifies positive relationships as a positive contributor to learning, stating the Mindframe as “I engage in positive relationships” (Hattie & Zierer 2018). However, the other nine Mindframes require an underlying I-CORT approach in order to be used most effectively. An overview of the implementation of Hattie & Zierer’s 10 Mindframes at Clarkson Community High School can be found at the following link: <https://vimeo.com/282596679>.

In Chapter 3 of John Hattie’s Visible Learning For Teachers, he describes the beliefs and commitments of expert teachers. According to Hattie, an expert teacher creates an optimal classroom climate for learning based on trust (Hattie 2012). An expert teacher believes that intelligence is changeable rather than fixed, as supported by the work by Carol Dweck on Growth Mindset (Dweck 2006). This type of mindset towards others requires high levels of optimism and respect. Overall, expert teachers’ scope of influence goes beyond that of improving test scores (Hattie 2012). One could even say that the influence of an expert teacher “[summons] people to realise their relatively boundless potential in all areas of worthwhile human endeavour”. An expert teacher, in other words, is an invitational teacher.

In the recently published book by John Hattie & Klaus Zierer, 10 Mindframes for Visible Learning, the authors cast a vision for the future of education: “We, too, have a dream for developing passion in learning and developing an education system that values inviting all students come and learn, to belong, and the reinvest in their own learning. We have a dream for an education system that develops respect for self and respect for others...” (Hattie & Zierer 2018, p. 167)

This vision for the future of education in the most cutting-edge contemporary educational discourse describes an I-CORT system, founded on self-concept theory which is considered a foundation of Invitational

Education. As humanity delves deeper into the understanding of what it means to teach effectively as to make the learning visible, the clearer it becomes that the best teacher adopts an intentionally inviting stance.

Within the context of Clarkson Community High School, we have been exploring Hattie & Zierer's 10 Mindframes and looking at how they translate into our classroom practice. By being consciously aware of the Mindframes and the practices which help us translate theory into practice, we can become more intentional with how we wield these practices. Recently, we looked at Chapter 6, which is based on the mindframe, "I give and help students understand feedback and I interpret and act on feedback given to me." As with all of the other Mindframes, it makes clear reference to the role of both the teacher and the learner. However, this Mindframe particularly fascinates me, as the roles of the teacher and the learner are very similar. In other words, the teacher is clearly identified as a learner within their own right.

As I reflect on Chapter 6 of Hattie & Zierer's 10 Mindframes, I remember a notation from Dr Howard Hendricks which I shared with Principal John Young on my first day at Clarkson: "I would rather have my students drink from a running stream than a stagnant pool" (Hendricks, 1996).

Stagnant pools (such as lakes or ponds) hold water for extended periods of time, but the water does not move, or moves very slowly. As a consequence, there are increased risks of pollutants building up in the water. Lakes and ponds were most commonly formed a long time ago during the Ice Age, but each one is ultimately destined to 'die' due to the increase deposition of particles that cannot be filtered out of the water.

Conversely, bodies of water which flow (such as rivers and streams) are fed water from a variety of sources (e.g. rain, melting snow and underground springs). Rivers and streams gradually cut away at the land over time, changing the landscape permanently. This impacts the flowing stream in a meaningful way because the removed land allows for a greater volume of water to flow over time.

The notation by Dr Hendricks is not really referring to actual streams and pools – it is an analogy for growth. In other words, for learners to be growing effectively they must be gleaning knowledge and wisdom from those that are growing themselves – just because we are in charge of the learning does not imply that we ourselves are exempt from learning. In the words of Goodwin & Hubbell, "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." To continue our

learning journey as teachers is an intentional act by asking the following questions of ourselves as educators and our students as learners:

- How am I going?
- Where am I going?
- Where to next?

As teachers responsible for student feedback, our approach must allow for students to both receive and understand feedback. Providing feedback for students requires 3 levels:

Task

- What can/can't learners do?
- Did they reach the goal or not?

Process

- How did students get to the goal?
- How did they work?

Self-regulation

- How did they self-regulate the product and the process of their learning?

It is important that we provide all levels of feedback at the level appropriate for the student. The levels "are connected and interact with each other", so we must artfully and intentionally use them in concert with each other to provide maximum impact.

Within my own teaching practice, here are examples of some strategies I use and 'spaces I create' to allow for each level of feedback:

Task

- Encouraging students to check answers in the back of their textbook – in other words, was their answer right or wrong?
- Linking types of questions or understandings back to success criteria displayed clearly in the classroom – 'Are you able to do this yet?'

Process

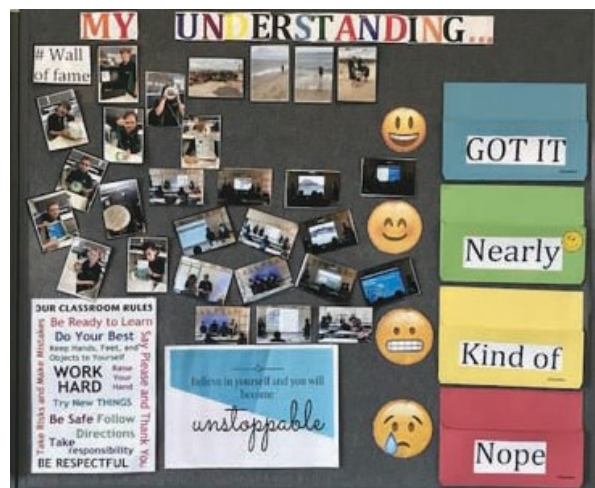
- Students are encouraged to ask when they identify a question they 'got wrong' when working through practice questions – this allows me to critique their process and provide feedback on how they should approach similar questions in future
- Explicit teaching model as appropriate, using the 'I do, we do, you do' to teach processes while also slowly granting independence to make mistakes and learn from them
- Homework club and my availability via email give students opportunity to ask about the required process or to critique their own process through access to my explicit teaching outside of class hours

Self-regulation

- As you can see above, elements of the feedback provided (and the way in which I provide feedback for the above two levels) have a level of self-regulation embedded within them
- Students were coached from the beginning of the year to use a growth mindset when approaching challenges, which has enabled them to self-regulate emotionally as well as when approaching technical problems that they need to overcome
- The use of growth mindset as an approach to managing challenges is a form of metacognition (thinking about thinking) – shown to have an effect size of 0.69 in Visible Learning – which allows students to regulate their approach to challenge
- The attitudes and behaviours of my classes through the implementation of growth mindset as a metacognitive strategy are starting to morph towards that described in 10 Mindframes, becoming “very good at seeking and using feedback”.

As we are teachers open to being lifelong learners ourselves, we must be open and responsive to feedback from peers, leaders and students. As Hattie & Zierer state, “Teacher-to-student feedback may be important, but learner-to-teacher feedback is just as or even more important.”

There are many strategies linking to Chapter 6 currently being implemented by the Mathematics and Science Learning Areas at Clarkson Community High School. One leader of the field is Mrs Louise Hall, demonstrating a wide range of feedback styles within her classes. Some of her approaches include visible classroom displays, providing visual opportunities for students to self-regulate their own learning (as seen in Figure 1) and also assessment feedback forms, allowing students to judge their own progress based on an assessment task completed and how they can address study skills which are lacking. These feedback forms have since been taken-up across both Mathematics and Science Learning Areas.



When provided with prompt questions on the impact of her feedback strategies detailed above, Louise provided us with the following responses, linking back to the overarching vision of Invitational Theory at Clarkson CHS. Within Louise’s answers (italic), you will see reference to ‘I-CORT’. These elements are also referred to individually, but each decision investing in these elements in Louise’s practice is shown to be intentional.

What was the evidence that shows you this strategy is working for your students?

I have asked all of the students to complete an anonymous feedback form based on the first eight weeks of the year. The feedback form and collated results are shown below:

If you use this strategy again (next week, next year...), are there any changes you would make?

I use this strategy every week and will continue to give students a feedback form once per term. I can use the results of this feedback form to refine the exit tickets and target specific feedback styles. Also ensure that the lesson is broken down into sections that are explicit, students understand what is expected and each task is evaluated (peer, self or teacher)

Tell me about a time students showed they are gaining Trust or Optimism.

Some of the comments on the feedback forms:

- “Science Rules!”
- “Mrs Hall is a good teacher and tries really hard.”
- “Mrs Hall is a really great teacher.”
- “Good teacher.”
- “I like Mrs Hall’s fun activities.”

These comments represent that the students feel comfortable in the room and trust in both my ability and the fact that I care about them.

I differentiate my activities and sometimes give students the option to choose the level to work at. The amount of students challenging themselves and striving to improve has increased. They are continually optimistic about the tasks given and the content being learnt. This energy can be felt in the room. I also find that teaching to different learning strategies within a lesson and having a clear lesson plan keeps a good pace during the lesson and allows students to see their own progress. As they have now built upon this for eight weeks it is clear they believe in themselves and feel responsible for their own work ethic.

I have included a slide I used in a lesson last week (Figure 6). Students had 10 minutes (clear time-limit expectation) to write down the positives and negatives of living near a volcano.

We then swapped books to peer assess (showing respect and care for each other). The students then used this slide to mark each other's work and had to write:

One thing you did well...

One thing to improve...

All students entered into this and were proud to share with me where they had done well and what they can do next time. This framed the progress for the lesson, showed them they had achieved something in the hour and sets an optimistic tone leaving the room. I find activities like this have created a strong I-CORT culture within my classroom.

How do you think our school might change if all the teachers use the I-CORT elements in their classrooms?

	Never		Someti mes		All the time
Mrs Hall gives me the motivation and inspiration to learn	1	2	3	4	5
I feel like I can trust Mrs Hall	1	2	3	4	5
Mrs Hall is optimistic about my learning	1	2	3	4	5
Mrs Hall provides engaging lessons	1	2	3	4	5
I know what Mrs Hall expects from me	1	2	3	4	5
Mrs Hall provides feedback on my progress	1	2	3	4	5
I feel comfortable during lessons	1	2	3	4	5
I feel more positive in science	1	2	3	4	5
Mrs Hall shows me respect	1	2	3	4	5
Mrs Hall is willing to offer	1	2	3	4	5

I think the above is just a snapshot of the positive I-CORT culture that can be created. If students were going from room to room with this mentality I think it would have a positive effect on attendance, attainment and school-wide culture.

One way this can be done is through small PD meetings offering explicit teaching methods to people, hosted by other members of staff, to help everyone reflect on strengths and improve their teaching and learning.

The ideas presented in Chapter 6 with feedback as a major theme cover a wide span of theory and practice within teaching and learning. However, the strategies listed above, which are intentionally implemented, aim to develop staff efficacy in the areas discussed which detail extremely high impacts towards making learning visible.

The work undertaken by Louise at a classroom level resonates with Clarkson Community High School's 'Teach the Teacher' program, a school-wide student voice project adapted from the work done at Mount Waverley Secondary College in Victoria. Information about the program can be found at the following link: <http://www.clarksonchs.wa.edu.au/index.php/news-1/principal-1/347-student-voice-teach-the-teacher>.

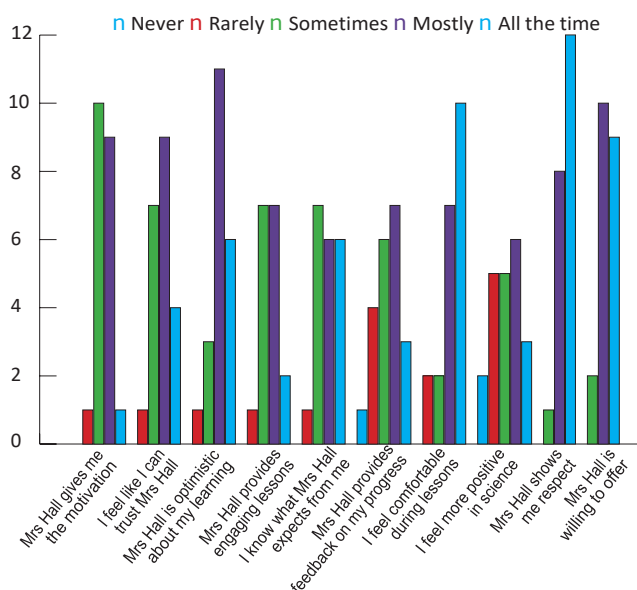


Figure 3: Year 8 Teacher Feedback Results

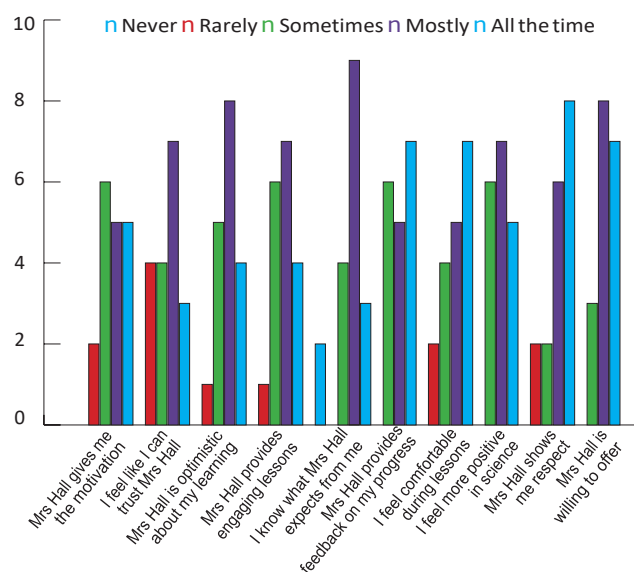


Figure 4: Year 9 Teacher Feedback Results

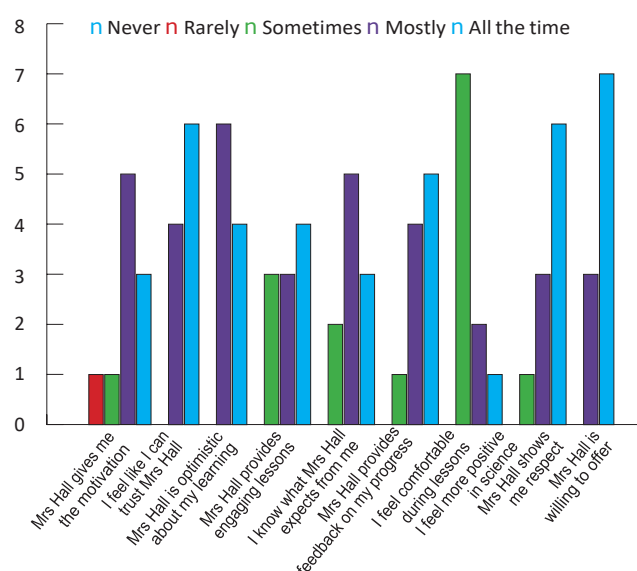


Figure 5: Year 12 Teacher Feedback Results

I think the above is just a snapshot of the positive I-CORT culture that can be created. If students were going from room to room with this mentality I think it would have a positive effect on attendance, attainment and school-wide culture.

One way this can be done is through small PD meetings offering explicit teaching methods to people, hosted by other members of staff, to help everyone reflect on strengths and improve their teaching and learning.

The ideas presented in Chapter 6 with feedback as a major theme cover a wide span of theory and practice within teaching and learning. However, the strategies listed above, which are intentionally implemented, aim to develop staff efficacy in the areas discussed which detail extremely high impacts towards making learning visible.

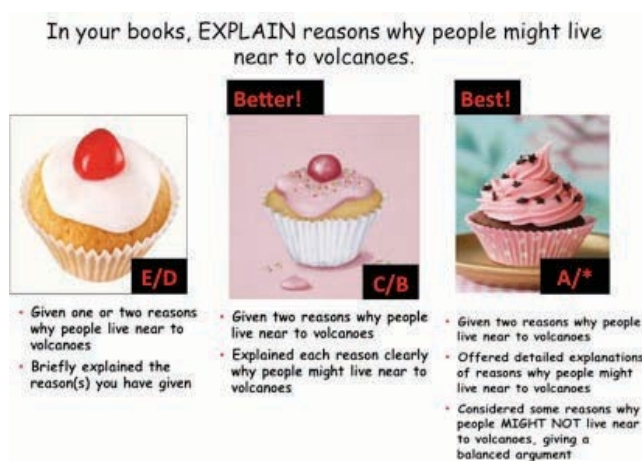


Figure 6: Volcanoes differentiation activity

The work undertaken by Louise at a classroom level resonates with Clarkson Community High School's 'Teach the Teacher' program, a school-wide student voice project adapted from the work done at Mount Waverley Secondary College in Victoria. Information about the program can be found at the following link: <http://www.clarksonchs.wa.edu.au/index.php/news-1/principal-1/347-student-voice-teach-the-teacher>.

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The Dialogic Approach: Replacing Monologue with Dialogue

Joanne Davies

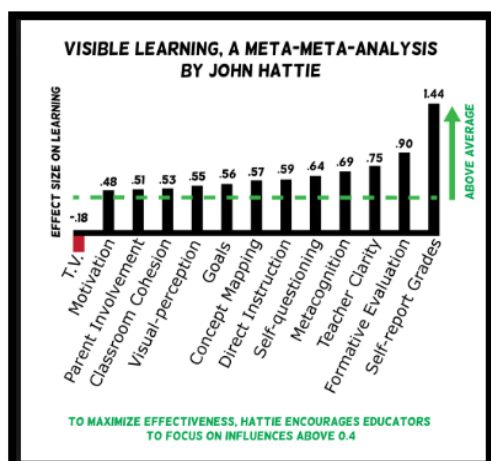
Joanne Davies is Second in Charge of Learning Area of English and HaSS, intermittently Acting Head of Department at Clarkson Community High School. Ironically, she started her journey at Clarkson as a student in 2002 and graduated in 2007. Whilst completing her education she was awarded student of the year (2 years in a row) and received the 'Caltex' accolade in 2007. Joanne returned to Clarkson Community High School in March this year as a qualified classroom teacher. She is currently working towards attaining her Level 3 Classroom status with the intention of becoming a Head of Learning Area in the future.



Professor John Hattie's work in *Visible Learning* (2009) has been essential underpinning for transformational change at Clarkson Community High School (CCHS)" (Young, 2016).

Hattie is renowned for his philosophy on 'Visible Teaching and Learning'. He states that "accomplishing the maximum impact on student learning depends on teams of teachers working together, with excellent leaders or coaches, agreeing on worthwhile outcomes, setting high expectations, knowing the students' starting and desired success in learning, seeking evidence continually about their impact on all students, modifying their teaching in light of this evaluation, and joining in the success of truly making a difference to student outcomes." (Hattie, J., 2012). The Visible Teaching and Learning theory is grounded upon an analysis of hundreds and hundreds of meta-analyses, consequently, determining the effect size of numerous influences on student achievement

Hattie, in collaboration with Klauz Zierer, defined and articulated 10 approaches to thinking that educators can adopt to maximise student outcomes (Hattie & Zierer, 2018).



John Young, Principal of Clarkson Community High School, has seen the difference visible learning makes. At Clarkson the faculty and staff are continuously propounding the question, **how can we accelerate student learning?** Our response to this query... an amalgamation of our research, shared beliefs, teaching and learning pedagogies and the use of data to inform instruction at a whole-school level, and at a classroom level. Young explains that "it is our *belief* that implementing Invitational Learning theory throughout every facet of our school has provided us with the best framework for success in re-culturing, re-structuring and re-timing of Clarkson Community High School" (2016).

Invitational Learning Theory provides an over-arching and encompassing framework cognisant of foundations, elements, domains, levels and dimensions that seem to influence human success or failure (Purkey & Novak, 2008)

"A student is the most important person ever in this school...in person, on the telephone, or by mail. A student is not dependent on us...we are dependent on the student. A student is not an interruption of our work, the student is the purpose of it. 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. A student is a person who brings us his or her desire to learn. It is our job to handle each Student in a manner which is beneficial to the Student and ourselves" (Purkey & Seigel, 2002).

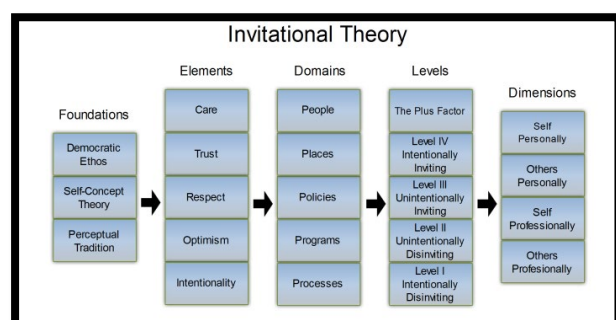
Staff at Clarkson Community High School adopt an evidenced-based approach to teaching and learning. According to Michele, “it is the process of evidence to inform teaching and learning, it must be explicit and accountable (equitable, representative, valid and reliable)” (Bruniges, 2005). In order to successfully accommodate for our students and their individual learning needs, we conduct a data review every five weeks (see figure 1 & 2), led by the Head of Learning Area (HOLA) for each subject area. This cyclical process enables the meta-analysis of students’ academic performance, as well as, allowing staff to examine, reflect upon, and to seek evidence to answer the following question; how effective and successful are our teaching methods and practices?

YEAR 7.3 ENGLISH Joanne Davies							
	Time	A	B	C	D	E	NA
Review 1	Term 1, Week 5	7	5	5	3	3	2
Review 2	Term 1, Week 10	6	7	4	2	3	2
Review 3	Term 2, Week 5	6	7	4	2	5	0
Review 4	Term 2, Week 10	7	5	6	5	1	0
Review 5	Term 3, Week 5	5	6	9	3	0	0
Review 6	Term 3, Week 10						
Review 7	Term 4, Week 5						
Review 8	Term 4, Week 10						

Figure 1: Represents data of year seven students (7.3) in English, from Term 1, 2018. This table shows that over the duration of the year the number of students achieving D's and E's has steadily declined.

YEAR 7.1 ENGLISH Mr Jones							
	Time	A	B	C	D	E	NA
Review 1	Term 1, Week 5	2	3	7	3	4	1
Review 2	Term 1, Week 10	3	1	8	7	4	0
Review 3	Term 2, Week 5	1	2	7	5	3	1
Review 4	Term 2, Week 10	1	2	8	5	3	0
Review 5	Term 3, Week 5	1	5	5	7	2	1
Review 6	Term 3, Week 10						
Review 7	Term 4, Week 5						
Review 8	Term 4, Week 10						

Figure 2: Represents data of year seven students (7.1) in English, from Term 1, 2018. This table shows that over the duration of the year the number of students achieving D's and E's has steadily declined, and the number of students achieving B's has increased.



As we move forward, we are consistently evaluating our impact at Clarkson Community High School guided by Invisible Learning and Invitational Learning. Furthermore, we are always striving for excellence in our professionalism and performance as a school and as individual educators of the Education Department. I

adhere to and strongly agree with former Director General of Department of Education Sharyn O'Neil that as an educator we should be striving for high-performance and high-care. This strategic plan highlights the importance of success for all students, high quality teaching, effective leadership and strong governance and support. We support this notion at Clarkson and ensure that we operate within the parameters of the Australian Institute for Teaching and School Leadership Professional Standards for teachers and school leaders, and the School Curriculum and Standards Authority. To achieve this, our leaders and educationalists follow the Performance Management process to review and reflect upon our individual performance and teaching pedagogies.

Cooperative Learning: Harnessing the Power of Peers

In the English-speaking world, interest in the role of talk in classroom teaching and learning extends back to the 1960s (Wilkinson, 1971).

Dialogic teaching and learning is founded on Vygotsky's (1978) sociocultural theory, Barnes's (2008) concepts of exploratory talk, Wells's (1999) dialogic inquiry approach, Gee's (1989) concept of D/d discourse, and Rosenblatt's (1994) transactional theory of reading.

Who does most of the talking in classrooms? Based on your own experiences, you're likely to procure the same conclusion: Teachers!

Scaffolded dialogue is extremely different from practices commonly seen in many classrooms where teachers construct question and answer sessions, and students bid competitively for the opportunity to give generally brief answers. In contrast, dialogic teaching is characterised by comparatively lengthy interactions between a teacher and a student or group of students in a context of collaboration and mutual support (Alexander, 2000).

George Zegarac and John Hattie (2013) embrace the belief and exhorts teachers to adopt a mind frame that leads them to choose dialogue, not monologue. In the classroom environment we want to encourage higher levels of thinking, and allow students to gain accessible, long-term knowledge and understandings of concepts being taught. To achieve this, we must adopt the dialogical classroom approach. Hattie (2012) further expounds that “cooperative learning is most powerful after the students have acquired sufficient surface knowledge to then be involved in discussion and learning with their peers – usually in some structured manner. It is then most useful for learning concepts,

verbal problem-solving, categorizing, spatial problem-solving, retention and memory, and guessing”.

Lev Vygotsky concurred with the notion of replacing monologue with dialogue. For Vygotsky, language is the medium by which children acquire more than information (Vygotsky, 1962)

The ultimate question is raised... *how do we maximise student outcomes?*

One mindframe described by Hattie, entitled ‘I engage as much in dialogue as monologue’, has been efficacious in accelerating student outcomes (Hattie and Zierer, 2018)

In the HASS and English Department, we utilise the ‘6P’s framework for Quality Questioning’ as a guide when developing lesson plans and units of work to ensure we are providing the students with maximum opportunities for discussion (prepare the question, present the question, prompt student thinking, process student responses, polish questioning practices and partner with students) (Walsh & Sattos, 2017). The framework is to assist students with the following:

- ❖ Focus their thinking on specified content knowledge,
- ❖ Use cognitive processing strategies to develop deep understandings and long-term retention of content,
- ❖ Ask academic questions to clarify or extend understandings,
- ❖ Monitor progress toward learning targets through self-assessment and use of formative feedback,
- ❖ Develop personal response-ability by using structural supports for thinking, and
- ❖ Contribute positively to the creation of a classroom learning community in which thinking is valued.

After completing my own research on the theory of ‘dialogue vs monologue’, I am now espousing the dialogic approach to teaching and learning and shifting from a monologue to a dialogue methodology.

Furthermore, I have been utilising the following strategies (suggested by Mercer & Dawes) in my teaching practices (2010):

- ❖ Provide small group discussions before whole-class discussions,
- ❖ Encourage a range of responses before providing feedback or judgement,
- ❖ Seek justifications and explanations of answers,
- ❖ Allow students to nominate others instead of the teacher doing so,
- ❖ Set ground rules collectively as a group,
- ❖ Use reflection for examining quality of talk within the discussion,
- ❖ Model the language behaviours you expect from your students.

As Second in Charge for the English and HASS Department, it is indispensable that I share and communicate with my colleagues of this successful and effective teaching pedagogy. I will coordinate and lead engaging learning area meetings and use the opportunities to present the research and data of the importance of dialogue in the classroom and apprise my colleagues of the dialogical teaching practices. Furthermore, I will provide support and guidance in the classroom to assist in successfully developing dialogical environments.

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Intentionality and Transparency Are the Keys to Successful Learning

Liam Mooney

Liam Mooney joined the Clarkson team in July 2017 as a Health and Physical Education and an Information Technology Teacher as well as year 9 coordinator. Since then he has performed the role of year 11/12 coordinator and acted as Head of Student Service (HOSS) for various stints. Having taught in the Goldfields, Southwest and South Metropolitan areas since beginning his teaching career in 2016 he has a plethora of knowledge of how to promote successful learning in a variety of demographics.



“Win or Learn” - Conor McGregor.

The application of this simple yet powerful motto to an educational setting can be done quite simply. When we experience success, we deem this to be “winning”. When we fail or are not successful in completing a task we either learn from our mistake or we lose. It could be argued that we need to make smart mistakes. Making smart mistakes mean we learn from them. That is what education is about.

Hattie and Zierer (2018) ask us to self-reflect in the following areas at the beginning of chapter 8 by giving yourself a score from 1-5 next to each statement below. 1 being rarely – 5 being always

- I am very good at...
 - Showing the learner what the goal of the lesson is
 - Showing the learner what the success criteria of learning are
- I know perfectly well...
 - That learning needs clear, challenging, and transparent goals
 - That the visibility of the success criteria is an essential aid for learners
- My goal is always...
 - Make the objectives of teaching, clear, challenging, and transparent
 - Show learners the success criteria
- I am thoroughly convinced...
 - That is my job ensure clear, challenging, and transparent goals
 - That the visibility of success criteria is important for learners

As a proficient educator, self-reflection forms a part of what should be weekly, daily and lesson by lesson practice. Self-reflection can range from formal

conversations held with line managers after a performance management meeting to the informality of a “wow that lesson felt good” and jotting some brief notes on a lesson plan or daily work pad. What is this self-reflection tool above asking us? Are we being explicit in our learning intention, our success criteria and our instruction? If yes, we are making the learning visible if no then we need to reassess our practice.

The 8th mind frame ties in nicely to Health Physical Education, particularly, to Physical Education, what it asks of us comes as second nature to typical lesson. The foundation of our learning programs is to enhance students through the phases of learning, from cognitive, to associative, to autonomous. That is, they go from needing numerous prompts, cues and visual aids, to practicing the skill in a variety of controlled environments whilst being given specific and timely feedback, to then being able to perform the desired skill without conscious thought but with maximum accuracy, efficiency and effectiveness in open and uncontrolled environments. To enhance this process students must understand what success looks like. In all effective learning cycles our lesson students must be aware of the following:

- Learning intention
- Success criteria

How we share this information can be done in a variety of ways. One way to assess how well students are grasping the ‘point’ of a lesson is to not share them until after the lesson. When you finish the lesson ask your students what they think the learning intention and success criteria should have been. After discussion as a class reveal to them what the actual learning intention and success criteria were. Hopefully they would have been close, if not that part of the learning

cycle may need to be revisited. This is a simple yet effective method of reflective practice.

According to Hattie and Zierer (2018), Learning is a process, it can be broken into 5 key stages that a learner experiences throughout a learning cycle. The success of a learning program can often be attributed to how and if we make learning visible. You may have guessed how this can be achieved, provide students with clear and concise learning intentions and success criteria. Objective and success criteria are crucial for learning success. As teachers, it is vital we teach the following didactic implications to our students.

- Self-assessment; assessing where they are in the learning process.
- Self-commitment; students who take responsibility for their learning experience greater success.
- Self-confidence; trusting in their own ability is important to success.
- Expectations of the learner; Making students explicitly aware of the learning intention and success criteria forms the basis of visible and intentional education. Learners who understand what is expected of them will perform/achieve better.
- Conceptual understanding; that is the learner transitions from superficial to deep understanding of content. Neither can exist without the other, but both are imperative for learning.

Hattie and Zierer (2018) ask us in chapter 8 to do the following in our classrooms “place these success criteria at a central place in the classroom – not on the sidelines – and refer to them throughout the lesson. Make learning visible and create challenges, self-commitment, trust, reasonable expectations and conceptual understandings.” If we can do this, we are

explicitly informing students what successful impact looks like from the outset.

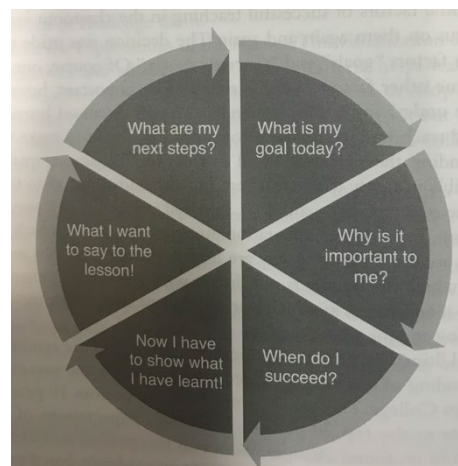


Fig 1 – 8th Mind frame Graphic

The above graphic is effective in its simplicity and subtlety at portraying what each learning cycle should involve. Effective teaching and learning requires collaboration between the teacher and student. It is vital that as teachers we make learning visible to students. The above graphic is a tool for making learning visible. Making such a graphic visible in class rooms and striving to be intentionally inviting (Purkey and Novak, 2008) allows us as educators to provide an environment that promotes educational success.

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Mary Poppins: “I am Kind, but Extremely Firm”

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. At Clarkson Community High School, 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.



What is Chapter 9

I build relationships and trust so that learning can occur in a place where it is safe to make mistakes and learn from others. John Hattie and Klaus Zierer starts of their chapter with a checklist so let's start this article with a checklist, and answer them honestly as possible, rate your answer from 1: strongly disagree to 5 strongly agree

1. I create a safe learning environment in my classroom
2. I have high expectation for all my students (p.g. 130)
3. I have an atmosphere of security, trust and confidence in my classroom. (p.g. 132)
4. I smile often when I am in class.

“Learning requires positive relationship - whether between learners and teachers or between learner and their peers.” (p.g. 129). In relations to Maslow's Hierarchy of Needs every student needs to believe that they belong in the classroom and the teacher cares about them and their education. This is represented in I-CORT's 'CARE', “... none is more important than the educator's genuine ability and desire to care about others and oneself” (Schmidt, 2002). When we first start teaching, we get asked the following question: What makes a good teacher? What attributes does a good teacher have? The one common answer we get is a good teacher is caring, optimistic, respecting and trustworthy, in other words I-CORT, because we are not only teachers, but play a larger role in the mix, a role of a parents, a role model, a councillor, a nurse and list can go on. Therefore, it is important that as teacher we act intentionally.

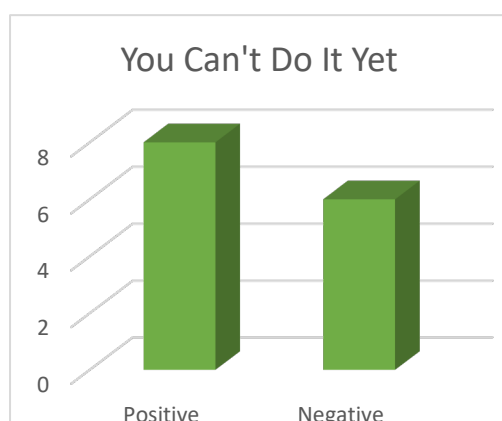
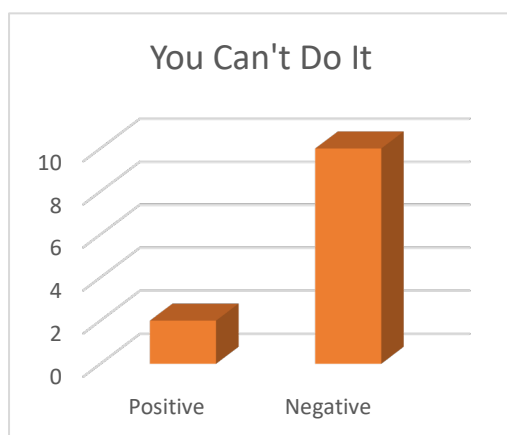
One way we can act intentionally is to create a learning environment where “it creates the conditions where it is okay to make mistakes” (p.g. 134), learning is difficult and mix in cognitive and emotional growth can take their experiences to whole new level, thus it is important that we “chooses approaches to reduce anxiety” through instilling confidence in our students. This creates the IKEA effect.

What is the IKEA effect? Have you ever tried to put together an IKEA product? You'd think you need a degree in IKEA to put together a table. But Hattie and Zierer highlighted the consumer psychology where “people who succeeded in doing it value the IKEA bookshelf more highly...” (p.g. 135). This is because it is the product of our hard work and it is the effort we put in it is what we celebrate. This notion directly applies to our students. If they can find success in the class, they will feel more confident to work to the best of their ability and more.

When can I do it?

“Miss I can't draw!” “Miss this is rubbish!”, “Miss I am going to fail.” This is what you will commonly hear in a Visual Arts classroom or any classroom as a matter of fact. So how do we deal with that? Carol Dweck's 'Power of Not Yet' is one way. During one of her TEDtalks, Dweck spoke about her experience at a high school in Chicago. The students at are required to pass a certain number of courses to graduate. If they do fail, they are given a “not yet” grade. The concept of “not yet” is powerful. Hattie and Zierer explained that the study aimed to determine the difference between “You can't do it” or “You can't do it yet”.

In Visual and Media Arts, students were asked to identify the different emotions they felt when a teacher told them “You Can’t Do It” and “You Can’t Do It Yet”. The graph below shows the data from the survey.



The data suggest that, when a teacher says you can’t do it, creates a negative emotion such as: upset, confused, annoyed, angry and hurt. On the other hand, when a teacher said “You can’t do it yet” students showed mixed emotions. Positive emotions included: relieved, fine, happy, thoughtful, confident and negative emotions included: angry, disappointed, annoyed. The next step was to ask students what they would like to hear, and there was one common phrase: “With more practise you can do this”, students said that they found this more encouraging and motivating.

As a result, the use of positive language in the classroom is important for us to reduce the anxiety in class, and help students feel okay to make mistakes.

Student Voice

Clarkson Community High School is implementing Teach the Teacher, it is a student led program run by students, where they identify areas of need in the school based on feedback by students. The goal is:

- To improve student-teacher relationships
- To build a better foundation for open communication centred on feedback

Teach the Teacher ties in perfectly with the notion that “We believe the true purpose of getting an education is to apprentice students into becoming their own students... We want them to have tools to they need to formulate their own questions, pursue meaningful answers...” (Hattie, 2017, p.g. 176). Teach the Teacher allows the student to become independent learners and encourages them speak about their needs in the classroom, this is important because a teacher student relationship works both ways, giving the students a voice gives them the accountability for their behaviour and learning.

Because I am happy

I conclude this article with Marry Poppins “I am kind, but extremely firm.” A question for the female teachers: how many times do you get called Mum in the classroom? It is so frequent that sometimes we don’t notice until another student points it out. This is because in the classroom we more than just teachers, therefore it is important that we are kind to the students, along with being extremely firm when need to be. “The idea that humour and cheerfulness are an essential part of successful instruction” (Hattie, 2018, p.g. 136). Like Hatti said, a smile sends out a positive signal, it shows the students that they care, they want to be here compared to when a teacher walks in grumpy in class which sends a negative signal which is read as being that the teacher does not want to be there. The base of a positive teacher student relationship is the smile they see at the start of lesson. A smile is contagious, if you smile then, then your students will do the same.

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Theory in Practice: How Students Can Be the Teachers

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.



While Science continues to grapple with the notion of time, “We live in a momentary present...this present is in motion, flowing continually into the past.” While the past is gone, the future is always “flowing toward us” and with that there is hope. By that I mean that we are not freeze-framed by past mistakes, like flies in amber tombs. When the clock turns around to morning, we can give life another go; learn new ways of being; repair a cracked relationship with a family member, friend, colleague or student. Forgiveness of self and others is powerful; a letting go of resentment is good for everyone. Students sense our forgiveness when we greet them kindly, no matter how challenging they were the day before. When we do this we are sending a silent message that they are worthwhile and that we care for them personally. To quote a tenet of Invitational Theory: “Care is at the core of the inviting stance. Of all the elements of invitational theory, none is more important than a person’s genuine ability and desire to care about others ... Caring, with its own ingredients, such as warmth, empathy, and positive regard, provides a person with the means to be a beneficial presence in...the lives of others.” Similarly, it has been noted that a positive teacher-student relationship is essential for successful learning and this is something that can be nurtured both in and outside the classroom. While a teacher is responsible for reducing anxiety within the classroom, all school staff, by their warm and friendly demeanour towards students, whether they teach the individual or not, have a share in creating a warm school environment that reduces the levels of anxiety in students. The essentialness of building relationships and trust is the highlight of Hattie and Zierer’s ninth mindframe. This may be as simple as “sending out” a smile; “A smile is contagious – especially when it comes from the heart, is sincere and authentic,

and is shared in the community.” While we, the adults, strive to embed these healing qualities into our own practice, it is often our students who lead the way. Like a shy, nocturnal creature, the element of caring for others is not always easy to detect in teenagers, as many desire, above all else, the cloak of invisibility; but it is there and when it emerges, the selflessness without show is an absolute delight. The vignette that follows is an example of this.

Two Nouns, Two Verbs and a Boy

Once upon a time, a very long time ago now, about *last* Friday, one of our smallest boys stood chatting to the teachers on bus duty about his books, his scooter and the fact that he was turning twelve next week. It was a rotten, cold, blustery day and he was dressed in a tatty school shirt with no jumper or jacket. The teachers found out that he didn’t have one at all. He climbed onto the bus. The girl ahead of him had no money and was taken to task by the bus driver. Without further ado the boy tucked his scooter under one arm and pulled a coin out of his pocket. “I’ve got some money...here.” He said to the girl. He waved goodbye, the girl paid for her ticket and the bus was off. The two teachers melted. What a kind act, which led to plenty of mollification (a neologism; not yet discovered by the Oxford English Corpus) over what they could do for him in return and decided to buy him a jacket, bearing in mind that this was an extrinsic reward as opposed to an intrinsic one, but it seemed a reasonable thing to do anyway.



The boy's generosity: unassuming, with no fanfare or expectations, is the epitome of the concept that educators are endeavouring to apply in the classroom; that of being invitational and in a wider sense is related to the idea of hospitality. The etymology of this word traces back to hospus 'he who entertains a guest.' Hospitality has also taken on a broader meaning of 'kindness to strangers'. It is related to the absolute antithesis of its meaning; the word hostility; originally, a hostis was a "stranger and a foreigner." Both words share the root word ghas, a Sanskrit word, "Meaning 'to eat', 'to consume' or 'to destroy'. Clearly, the two modern words chose divergent pathways. And so, do we have to choose as educators. In a confrontational world it is easy to 'be hostile', or we can choose 'to invite'; to show hospitality or its antonym hostility. It is a daily decision with which we grapple for obvious reasons. The boy on the bus, our little student, demonstrated that kindness to strangers can be a simple, unprompted act from the heart. What of the boy and the jacket? He's wearing it now.

This heart-warming story reminds all of us to 'seize the day' or the momentary present, with intention, which means that we will sally forth each morning and actively look for opportunities to make a difference in others' lives. The question of where the motivation to do so comes from is summarised by the notion of care or caring, which is a heart-felt emotion. Without genuine care, one is simply going through the motions of providing for others' needs. Nel Noddings in her book, The Challenge to Care in Schools highlights the "...significance of nurturing the caring impulse as integral to the human condition." Genuine heartfelt-ness, she infers, must underpin the action to be meaningful. In this hostile world, where some choose to "consume or destroy" it is heartening to see that many are intent on showing "kindness to strangers", thus easing the pathway to educational success for students.

I Focus on Learning and The Language of Learning – But What is it and How Do I Know It's Effective?

Melisa Edwards

Melisa Edwards joined Clarkson Community High School in February of 2017 as a math and science teacher, teaching a variety of lower school and upper school general and ATAR subjects. Prior, to taking on her position at Clarkson Community High School, Melisa worked at Hampton Senior High School where she ignited her passion in teaching and decided to make a career change. Prior to teaching Melisa was a hydrogeologist with BHP for almost seven-years working both in remote regional communities via FIFO and in their central office. Melisa completed her BSc in Land and Water Resource Science in 2010, BSc (Hons) Applied Geology 2011, DipEd (Primary) and Golden Key Society in 2015, Dip Raw Nutrition in 2016, Switch Education – Secondary Science in 2016, Med (Primary) in 2017.



Hattie and Zierer released the 10 Mindframes for Visible Learning in 2018. Their article discusses and evaluates the transition in pedagogical approaches over-time and refers to the validity of the research behind some of the key pedagogical approaches that have underpinned many well-known teaching practices that have been and continue to be used today. Hattie and Zierer look into behaviourism and make comparisons between the original study of the dog salivating and how it has continued to be applied within a modern teaching environment. It focuses on the concept of effective teaching occurring when the correct external stimuli have been activated however, what this model lacks is the effect of activating prior knowledge. The importance on unlocking and activating prior knowledge was highlighted in subsequent pedagogical approaches such as Cognitivism. Piaget discovered Cognitivism in 1936 and explained the process of metacognition in relation to cognitive development, biological maturation and environmental interactions. These elements and their importance were highlighted in Hattie and Zierer 2018 as some of the key elements missing from previous theories such as Behaviourism. It must be noted that all pedagogical theories can be

effective independently or in combination with other theories to cater to the needs of students. The needs of students vary and are in a constant state of flux dependent on various factors; such as prior knowledge, socio-economic background and environment. These factors are pivotal in defining a students' personal belief and the value upon which they regard having an obtaining an education.

Goos (2004) explains the process of learning, participation and identity as a social experience created within learning communities where both the teacher and student are participants that can learn from one another (Goos, 2004). Creating learning communities supports student participation and engagement. It requires students to work collaboratively within their learning community, which promotes accountability and requires students to activate and share their prior knowledge. Wegner (1998) elucidates on this and further explains that participation through learning communities provides the foundation for students to construct and shape their identities as members within the classroom and/or learning community. Despite, participation contributing to Goos's learning experience model, Sinclair (2004), highlights the multi-dimensionality of participation and

classifies it as either passive or active. Active participation supports student engagement and relates to students becoming involved in their learning and being able to demonstrate their depth of knowledge and academic proficiency based on their understanding of the learning materials and ability to apply these learnings in context and in new situations. Passive participation can be associated with compliant disengaged students; these students' may complete a task but still lack the ability to apply these skills in new contexts. Engagement involves the activation of prior knowledge and refers to the reflective involvement of obtaining a deep understanding, valuing and actively participating in the tasks and learning community (Munns and Woodward, 2006). Klein & Saunders (2004) and Lewis & Ketter (2004) explain how engagement can be stimulated within the learning community through student contribution and participation with the learning community over-time to gain coherence and help form a sense of identity and self-concept within a group. A crucial part of stimulating engagement is through the activation of prior knowledge. This is pivotal in defining a student's proficiency as it provides an insight into the students past and current academic stance. It also provides the teacher with an opportunity to acknowledge and address knowledge gaps. It also supports more authentic learning, catering to student needs and interests. Hattie and Zierer (2018), quantify the effect of activating prior knowledge and the effects of the Piagetian programs through its determination of an effect size of $d=1.28$, which is one of the highest effects in Visible Learning (Hattie and Zierer, 2018). Second, to Piaget's programs is the factor attributed to "prior knowledge" with a Visible Learning effect size of $d=0.65$ (Hattie and Zierer, 2018)

So, what does this all mean and how does it influence teaching?

In acknowledgement, of the meta-analyses and additional research conducted by Hattie and Zierer, the prominence of activating prior knowledge and being able to acquire and use this knowledge as teachers is vital to effectively make the learning visible and for teachers to quantitatively know thy

impact. One way this can be achieved is through the process of "Concept Mapping" this can be done in collaboration with the class. This activity allows the teacher to gain an insight into the students' prior knowledge and can be used to tailor future lessons to their interests and needs. The intent of the Concept Map is to essentially allow students to summarise their knowledge of a concept in a structured way, this promotes students to check-in and track their progress. For the teacher this provides an insight to the students' prior knowledge. This information is used and embedded within future lesson and unit plans to effectively cater to the students' needs. Recognising student need is essential to effectively differentiate the learning materials appropriately to ensure that the cognitive load of the learning materials are appropriate for the students and their proficiency.

Why is Cognitive Load important and what does it mean for teaching?

Cognitive load stems from the pedagogical approach of Cognitivism and relates to the mental load of the learning materials, assessments and language used within the learning environment when a student is presented with new or additional information. There are three types of cognitive load they are: intrinsic, extraneous and germane. *Intrinsic load* refers to the students' academic proficiency and the level of difficulty of the task that they are presented with. As the level of difficulty increases, so too does the intrinsic load. *Extraneous load* refers to the layout and physical presentation of the learning materials. This may include worksheets with cluttered or superfluous information causing the learning materials to appear overcrowded and hence increase the cognitive load. Lastly *Germane load* refers to the effort required to understand the learning materials to acquire knowledge.

As a teacher, it is important to understand the learning objectives, intentions and success criteria attached to each learning experience. These are embedded within each lesson to allow the teacher to visibly and transparently convey the learning objectives, intentions and success criteria of each learning experience to the students. Having a deep

understanding of these three criterion supports the teacher to effectively manage the cognitive load of their students through careful preparation and selection of materials to prevent students feeling overwhelmed or feeling anxious due to heightened cognitive loads. A key part of managing cognitive load is understanding instructional language. Instructional language can be used to break tasks into smaller segments to allow students' to more effectively navigate and progress through the learning materials. Instructional techniques may include; visible step-by-step instructions, following a procedure, this-then-that instructions, reduced language, rubrics or task lists.

Next steps to implementing and focusing on learning and its language

To effectively manage and track student learning and progress it is crucial that comprehensive diagnostic assessments are completed to quantifiably assess the students' prior knowledge and skills in amalgamation with goal setting and success criterion activities to allow students to understand their learning progression. This will support students to develop learning goals aligned to the success criterion, which will assist them to develop as reflective individuals.

Exposing and activating prior knowledge is fundamental in truly being able to cater to the needs of students. Nuthall (2007) revealed that in most classes, students may already know up to 50% of the learning materials being presented to them (Nuthall, 2007). These findings highlight the importance of activating students' prior knowledge to prevent re-teaching concepts that the students have already demonstrated their competence.

Evaluating students' prior knowledge and experience at the beginning of each learning sequence through diagnostic assessments, proficiency check-lists, concept mapping or other methods is crucial to assess and track student progress as they work towards meeting the learning objectives, intentions, and success criterion. Deeply embedding these practices will support students to engage in critical self-reflection and measure their progress against the success criterion as they progress through the learning materials.

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*What a child can do today with
assistance, she will be able to do by
herself tomorrow.*

