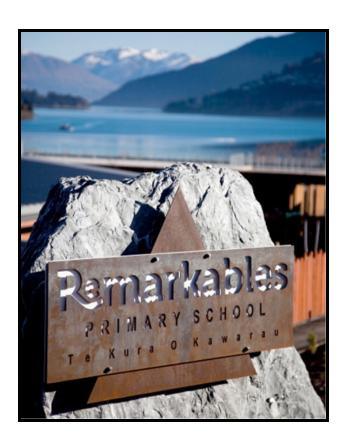


Remarkables Primary School Debbie Dickson Principal's Sabbatical Report

MY LENS OF LEARNING...
'How are learners using skills in a transforming world.'

Are they using the power of transference to connect knowledge and skills, with meta social learning (social physics), feedback, and different learning contexts?



Remarkable learners who are equipped and inspired to, take full advantage of life's opportunities within a global environment.

Nga Iwi Tumeke



Acknowledgements

I have greatly appreciated the opportunity for this sabbatical. It has allowed me an opportunity to reflect, take my learning deeper and transfer thinking with others.

This time has allowed me to:

- Collaborate with some amazing talented professionals around the Pacific both within the New Zealand, Australia, Online and the Cook Islands. As well as online conversations with visible learning teams in the US. Together we have stretched each other's thinking, reflected on latest research and looked at the core values, principles and practices behind the theory.
- **Iterate** and start to form and weave key links that support thinking skills and the developmental stages of the learning process (surface...deep...transfer). A peer review process has allowed rigour in evaluating effective practice, and feedback to support and create next steps and new learning. This has allowed me to work collaboratively to create and and rework strategies and frameworks that underpin our school direction, and form a fluid approach of thinking.
- Connect and work alongside wider community educational groups
 including the Cook Island Ministry of Education, Apii Nikao, Team Cognition
 and schools both here in New Zealand and in Australia. I observed and
 participated in a range of interesting, challenging and growth oriented
 activities and actions.
- Gain Feedback from colleagues, professors and co-workers, who have challenged me to look at what I, and our school is doing with a different lens. I believe that such open and robust professional discussion is a valuable feature of our education community, and critical for making informed decisions on future direction and the direction within our school context.
- **Reflect** and allow uninterrupted 'think and study' time to replenish my body and mind, along with refreshing myself prior to reentering the role as principal has been significant.

Importantly I took the time to thoroughly examine and challenge much of the work I have previously done in relation to teaching and learning, and how to best influence this positively within the school setting.

In relation to the 'impact' I have made. I would say we are in the early stages of review (gathering information, analysis and unpacking of data), regardless of what I may currently think – collectively as a team of learners our next step is to question and review:

- What are our core beliefs, values and principles?
- Do they meet the needs of our learners so they can perform successfully in a transforming world 21st-25th Century?



From this we will then be able to identify - 'What will our key practices
we need to develop and grow the ideologies?'

and only then the proof will be apparent over the next 3-5 years in the practices we engage in, at Remarkables Primary School.

This sabbatical and further study in 2016, has only been made possible by the generosity and support of others, who I would like to acknowledge and thank:

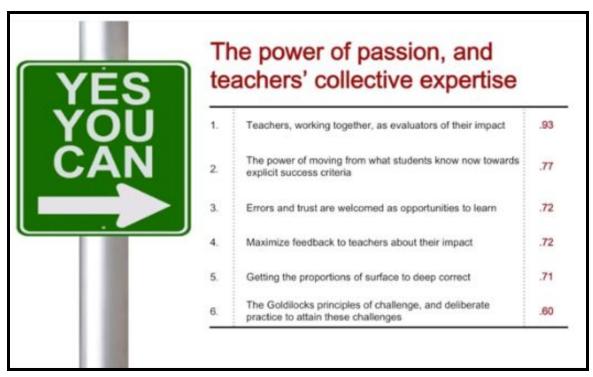
- My amazing family who journeyed with me over this time. They are the glue that keeps me going and wanting to be the learner, who perseveres and is committed to help others and gaining the best for all learners
- The Board of Trustees of Remarkables Primary School for their support with my application and for their ongoing encouragement to stretch thinking and enhance professional learning.
- The amazing Remarkables Primary School team, especially S Graham who took up the role as Acting Principal in my absence and R Blane who acted as Deputy Principal. The team was just awesome!
- The continued funding and support provided by the New Zealand Ministry of Education and New Zealand Education Institute who support the provision of sabbaticals
- Team Cognition- Visible learning lab, L Shanks, P McConnon, M Young, J Woodger, A Davis, T Mouldey, staff at Apii Nikao, St Joseph's Kangaroo Point- Brisbane, Cromwell Primary, W Banks, Alexandra Primary, A Gott and the Cook Island Ministry of Education that generously welcomed me into their learning contexts.

They made time to meet with me to discuss their environments and practices, and then work together on developing programmes that link surface and deeper

learning through transference.



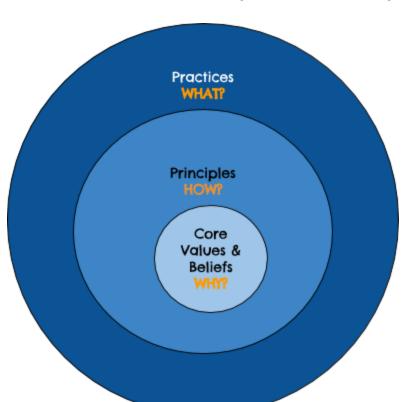




^{*}John Hattie - presentation slide Visible learning in action- effect size (August 2015 Sydney)

Purpose/ Methodology

Education must enable one to sift and weigh evidence, to discern the true from the false, the real from the unreal, and the facts from the fiction. The function of education, therefore is to teach one to think intensively and to think critically.



-Martin Luther King, Jnr

Through the process of reflection, and when working with schools, I have used the following questions:

Core Values and Beliefs ('WHY' - Why do we do what we do?):

My wonderings:

Are learners using the power of transference to connect knowledge and skills, with meta social learning (social physics) and feedback.

*Model of developing values and vision approach- Dr Judith Atkin 1996



To support them to successfully apply skills/ strategies or knowledge learnt to different learning contexts?

Are we measuring the true application of the learner? (Standards in isolation v's Transference (standards, skills and meta social learning in real contextual learning and application).



The Team at Cromwell, Alexandra and Remarkables Primary - connecting the power of visible learning together. Model adapted into the reflection process at Cromwell Primary.

Principles ('How' - How does what we do make a positive impact to learning?):

My wonderings:

 How is the transference model being applied / or could be applied meaningfully with the emphasis moving away from the knowledge about the subject / tasks at hand to 'metacognitive' aspects of learning?

> 'Emphasis (in our schools) is on what students need to learn, whereas little emphasis-if any- is placed on training students how they should go about learning the content and what skills will promote efficient studying to support robust learning." John Dunlosky 2013



Practices ('What' - What will the learning environment and learning opportunities be to foster shift in learning?):



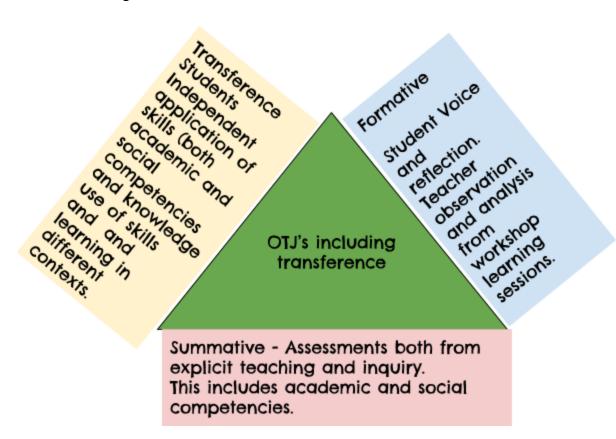
My inquiry practice:

- To investigate the use of 'transference model' (John Hattie, August 2015) as a key element within the learning process (surface- deep- transfer) to which in turn has a greater impact and effect size on the growth and development of teacher pedagogical practice leading to increased student achievement.
- Focus through visible learning process, Inquiry Learning and learning for Pasifika students and how we can accurately see shift in learning. I believe if we measured English and Mathematics skills in real context learning settings (Inquiry process) would we see the same level of learning and application of these skills and assessment measurements, as we do in explicit workshop/ teaching sessions, of these areas?

*My hunch is that we would not, due to the guiding nature of these sessions and from what I have viewed the non reference links being made on how to use these new skills and transfer them into the inquiry process.

I am also wondering if this would also apply with the social disposition skills (Key competencies).

• A strategic next step is to look at the use of OTJ's and to make reference to transference and see the true application of deep learning skills the students are using.



 Critique, by looking at what are the inhibitors and drivers of transference and then look at developing some effective teaching strategies around the



Transference Model of learning. This will enable Remarkables Primary School to discuss further our teaching pedagogy, and build on current practices to support next learning steps for learners in a practical way.

As well as look at ways of measuring effect size not only in explicit stand alone subjects but measures of reading, writing and maths skills in deep transferred learning in inquiry.

• To produce materials to support learners (staff and students) in being able to collaborate, scaffold and implement ideas, and thinking on how we can connect transference within the model of learning in a practical way.

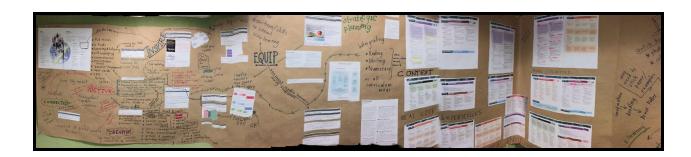
Our Credo

Learning is Job #1.

Abundant mistakes = learn more.

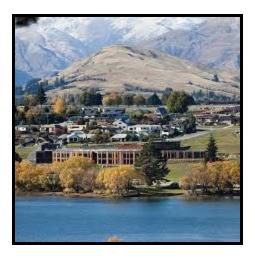
Practice makes perfect.

Focus & Feedback are essential.





Remarkables Primary School Context



Remarkables School is a U6 Decile 10 school which is nestled on the shores of the beautiful Lake Wakatipu, Queenstown. We are 6 years young, we have rapidly grown from 54 students to now over 570 students. In this time we have commenced the foundations of learning programmes that connect with the real world and our school vision (to equip and inspire each learner to take full advantage of life's opportunities within a global environment). Our school vision is also our inquiry framework where we plan, and scope all learning. Including the weaving of visible learning and social physics (learning pit, growth mindset, building

learning power) are working on developing the embedded approach Learning is messy.

Our student group is largely made up of NZ European, European with a small proportion of NZ Maori, Pasifika, Asian, Portuguese learners.

Our community has a transient population with many students moving in and out of the area over a course of a year. Therefore diversity, resilience and global connectedness are key learning focuses, that takes centre stage in our thinking and in our work.

The following quote from John Hattie 2013 (Visible Learning - Meta Analysis)
"What enhances learning?" and
"What works best to support future focused -orientated learning"

This quote provides key direction in my thinking in working with all learners (students, teachers, parents and the wider community).

A key driver at present within the educational world is the need to dig deep and look at how we are preparing our students for the ever transforming world. We cannot sit and do what we always have done, we need to adjust our thinking, tweak and grow our programmes to support and prepare our young people for a organically changing technological world, where we don't know the jobs they will move into.



Alongside this is another different but related imperative. Doubts about the ability of existing paradigms to solve current social, environmental and economic challenges mean that a future-focused education system must provide learners with past paradigms and the ability to think between, outside and beyond them - that is, the ability to work with a diversity of ideas. It is argued that future oriented learning should provide all young people with opportunities to develop these capacities."

*NZCER report to the Ministry of Education in 2012 – "Supporting Future-oriented Learning & Teaching - a New Zealand Perspective"

At present we are being presented lists of skill sets learners are now needing to enable them to be successful in a transforming world. It is not only the academic knowledge required but personal character skills and empathy for diversity.

Intelligence plus character - that is the goal of true education. Martin Luther King

The top 10 skills for the 21st century worker, according to University of Phoenix 2015 is:

- Critical thinking
- Leadership
- Communication
- Collaboration
- Adaptability
- Innovation
- Global citizenship
- Productivity and accountability
- Entrepreneurialism
- Accessing and synthesizing information.

Underpinning all the 10 elements above is the ability to know how to apply and transfer learning more deeply, and understand how these skills fit and work together.

No longer can we teach the academic skills as stand alone as 'an' or, 'or'. We must weave and develop the social competencies (Key competencies) together into all facets of learning.

Acknowledging the organic changes we are surrounded with, and the need to ensure relevance, learner connection, as learner resilience is evident in the Remarkables Primary School context.

The need for us to work continuously on the adaption of our approach to teaching and learning is clear. A focus on 'Student Learning and Achievement' underpins and is a 'given' for all of our work.

A further influencer is this key theme is from Guy Claxton...

'How are we working and filling potential for tolerance and diversity for the unfamiliar world.'



'How we help kids to read and do their sums, national standards, KC's and look at how these all line up. So they are not hit and missed and in conflict with each other.'

We need to choose to focus on tests (little to no impact) or develop programmes that:

- get the best for the whole child
- Initiate sticking the oar in and stretching the goals linking the traditional with the new
- being more precise, more explicit and building the facet of character (Fullen)
- Clarity and specificity and desired outcomes

High Impact!

It requires us to think harder... and to meet the full potential we **Need clear ways** to monitor and be measurable that is consistent across the school and between centres. For example..."to grow student resilience (staying intelligent engaged for longer)... are we collecting this evidence/ data? How do we know we are making shifting this?.

All links to the process of transference.

*Guy Claxton (Educating Ruby 2015)

Transference - A Model of Learning

Below is the initial development of Hattie's Research into RPS Learning context

Transference Definition:

- Transfer of learning is the ability to apply knowledge learned in one context to new contexts.
- Transfer learning occurs when the learner:
 - Recognises common features, skills or concepts and uses these common principles in the new learning situation
 - Links information from memory and values what is learned in one situation and applies it to another.

Surface and deep learning:

From my research studies, along with visits and work with the schools in Brisbane, Rarotonga and here in NZ. I have identified the following 4 Key fundamentals needed to be embedded into teachers planning, and teaching process to ensure deep and engaging learning. Rather than seeing ideas, concepts / skills and thinking sitting within the surface hemisphere.

Going deep with learning takes time, explicit teaching and structure, but with this comes rich learning and skills and a greater positive effective- size shift happening.



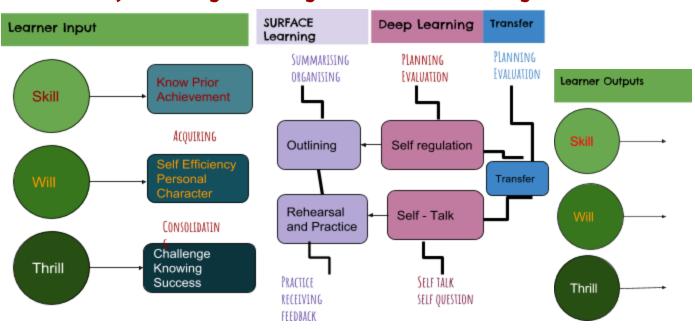
The 4 Surface to Deep Principles are:

- 1. Recognising the right approach needed at the right time The 'How'
- 2. **Programme design** teachers working with students to intentionally design classroom experiences that hit the surface, deep, and transfer phases of learning? (Linking explicit teaching into the inquiry model of learning)
- 3. Students and teachers knowing when they ready to dive from surface to deep?
- 4. Always reviewing and asking what is the impact- 'Know thy impact?'

To development of John Hattie's new learning model around 'transference' is an effective anchor for our teachers to use in ensuring the above 4 principles are used effectively.

John Hattie's (Learning Visibly - The Science of How we learn- reference material from J Hattie 2015)

Model of Learning - Linking into Visible Learning



This model looks at learning as a whole:

What are the learner inputs:

- Use of data, student reflection and Teachers OTJ's (Skill)
- Their social and personal inputs (Will)
 - * I noted in my visits and research this area was more often overlooked or not considered by teachers.
- Understanding the purpose and WHY (Thrill) if it does not connect with the learner no impact or negative impact occurs.



* I also noted in my studies making connections with kids was hurried in classes and a lot of teacher assumptions were made.

Surface Learning - is vital within a teacher's role

- This is where explicit acts of teaching occurs.
- Practice and application of new skills and linking with what it already known.
 Practice is not worksheets or regurgitation of what has been told or seen.
 Practice is:
 - students knowing what they have, or are learning
 - being given strategies to practice these skills in different environments.
 - TALKING as they go, getting feedback from their teacher and peers, as they go
 - being able to refer by themselves to criteria, so they can self regulate and check that they are on the right track.

Deep Learning - is students owning the learning and knowing what to do if they are stuck. It is important to note, not all learning skills, tasks and strategies go to deep learning as this is dependent on where the learner is at.

Transfer -is teacher and students using what they know into new situations with success.

* Through my research and visits I noted that there was deep learning but not a lot of transfer. When new skills/ strategies or knowledge was given or introduced, there was little to no recognition to what had came before. I felt areas of development that was needed was the importance of... explicitly connecting skills and expectations of prior knowledge to new learning and really looking together (teacher and learner at Learner Input).

Students often commented not another new thing to learn. I have only just the hang of the previous skill and now I need to drop this and learning. Rather than seeing the important links and the need to retain their learning and just add the new piece.

From my research, I feel at Remarkables Primary School over the next 24 months,

we will need to review through the lens of the transference model of learning, to see if our learning design and programmes are working at 'Surface' level or do they have a balance of 'Surface/ Deep.' Plus dig deeper and see if we are we making the connections of transference explicitly.

With positive learning shift and impact the key focus the aim of using the learning model is to enable us to:

 Grow individual learner capability (teacher and student). Thus giving both (teacher and





student) the leadership capability to apply and transfer skills (learner agency, skill acquisition and social competencies) confidently to improve learning.

- Provide learning accountability with the focus on positive shift and deeper learning
- **Be accountable of true measures** of how a learner is applying skill, and social competencies within all their learning (not narrowing the tunnel focus).

REFLECTION SUMMARY FROM MY VISITS TO OTHER SCHOOLS

During my visits to schools, I looked at how teachers and schools scaffold their programme development around surface/ deep learning.

During discussion and observations, I noted that many phases of developments were based on the surface parameters whereby the intent of learning was looking at coverage, and next steps. Rather than revisiting, developing learning and application deeper by transferring the same applications into new learning and new inquiries.

Surface to deep transfer was happening in stand alone subjects, *i.e. Mathematics, writing and reading*. Students knew the skills they were working on, what they needed to do. The missing part in many cases was the deep to transfer phases.

During my visits to schools, I asked students did they apply the taught/ learnt scaffolds, *i.e.* of a writing structure or statistical analysis, into their inquiry studies, or other learning. 80% of responses said "not really, only if it I was asked to". Observations made noted that this did not naturally happen from the students end.

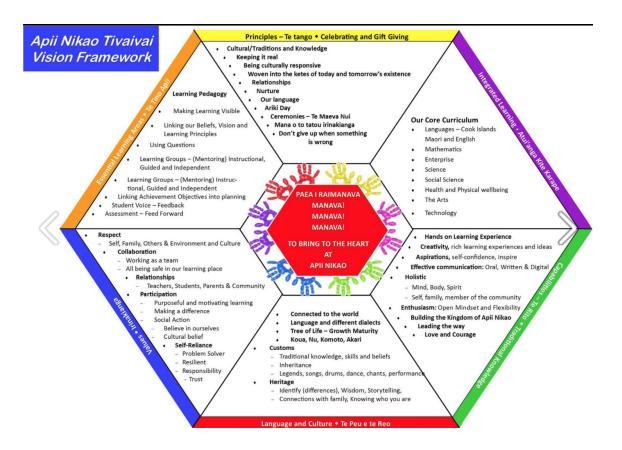
This made me reflect, on how we were developing the learning process for a transforming world at RPS, and what processes we needed to scaffold to ensure surface - deep- transfer learning evolved.

When working with schools in a mentor role on programme and vision development I looked at how we could apply the learning model when looking at things from a strategic lens.

Apii Nikao

- Apii Nikao Research Report based on the developments I worked on the Apii Nikao staff in the development of the new school vision and programme development using the principles of transference. Below are links to the development and visual images of the outcomes where students, teachers and whanau worked together to form a clear pathway.
- Powerpoint PL Slides to develop visioning process
- Rarotonga MOE Report







APII NIKAO LOGO

MOU MOU RIMA

(Collaboration)

Together we progress into the future.

E ONO ETU

Ko te au marae apii akataunga'anga.

(The six stars for the six learning areas.)

VAKA o te kite e te pakari, kia autu i te au kura o teia nei ao.

(Vessel of Educational Journeys and its Challenges)

TE MOANA NUI

E ngaru tu

E ngaru popoki

E ngaru akaeke

(The Waves of life)

Ko tatou i Ito (taito)

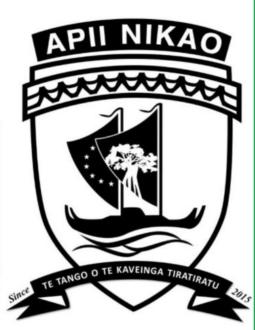
(Kapuaanga - Our heritage)

Ko tatou i nei

(Teia Tuatau - Present)

Ko tatou apopo

(Tutaau ki mua, Uki ki mua - Future)



KO TE ATUA E TATOU.

The Foundation of Prestigious
Navigation

SHIELD - ei paruru (Protection)

TE TUMU PATAI

Mei te tuatau mai o nga apii: Nikao Maori e Avatea.

Ei tamarumaru.

Ei akamanea.

Ei akaanuanu.

Kua tupu e kua totoa te aka e te au rara.

Kia akapera rai koe e Apii Nikao.

Te tumu patai, ko te pito teia o te Maraurau o te Apii.

FLAME TREE

A symbol of growth and progress

A history of the
Core of Education in
the Cook Islands as
this 'paepae'
nurtured all that is
learning in the
country today.

Brisbane

- <u>Leadership Mentoring PL Slides</u>
- Planning development Sheet



On my return and over Term 4, and in 2016 I have been working on linking and adapting the following 8 strategies to RPS context. The strategies are a accumulation of resources (linking visible learning, Hattie, Fullen and Robert Marzano current research and initial learning development by unpacking and making it explicit to support; teachers and learners in the process of surface to deep to transfer learning.

Again please note this is a starting foundation and my focus has been to share the initial thinking and development of the process rather than the outcome. As we journey further these initial developments will most likely grow and develop organically based on findings, reflections and further research.

RPS Explorers and Expedition Leaders 8 Strategies to support the development of 'The Learning Model'...

1: Student Agency

My Learner Backpack and Map



'What I bring with me to my learning.."

Skills, tools, experience, knowledge and a learning map.





A Model of Learning:

Inputs ──Surface ── Deeper ──Transfer ── Outputs

Part one of the Model: There are 3 main INPUTS which flow out as OUTPUTS from the learning process.

SKILL: This involves what students bring to class (prior knowledge, prior skills, culture, home beliefs, misconceptions and understandings).

WILL: This involves the disposition of learning such as resilience, relatedness, self efficacy..

THRILL: This relates to the motivational attributes - the desire to master rather than perform, growth mindset, the desire to achieve success and an evaluation of the probability of attaining success criteria.

The most important single factor influencing learning is what a learner already knows?



* Copy of slide from T4 Professional Learning Session (D Dickson)

Clear and Focused Lessons

According to Hattie, *teacher clarity* is one of the most potent influences on student achievement.

- Clearly state what you want your students to learn but also importantly recognise what they bring to the learning- get them to articulate this (SKILL)
- Can focus on surface or deep learning (or both)
- Must be challenging for the students relative to their current mastery of the topic get students to talk about their social competencies (WILL) and
- May be grouped (i.e. a single lesson may have more than one goal)
- What are today's lesson goals?
- What do I already know that will help me achieve these goals?
- What actions will I need to do to ensure I achieve these goals?

Looking at the use of shaping the inputs by ..

Change the learning intention into a 'how' question

We are learning about fractions changes to How do we use fractions successfully?

Why make the change:

- 'how' makes it a question that focuses on a skill
- it invites kids to engage and share their prior knowledge
- include the word 'successfully' so that it is achievement focused, measure orientated
- leaves this open for differentiated learning



* This slide is from T4 Professional Learning Session (D Dickson)



Please click on the following link of the professional learning sessions we held around Strategy 1.

RPS Professional Learning Sessions T4 2015

2: Learning Input

My Learning Team (student- teacher- peers

- Other contributors to the learning process)

Offer Overt Instruction

Robert Marzano claims it is important to explicitly teach your students the things they need to learn. His review of research actually revealed it was <u>the most important factor</u> (teacher controlled) affecting students' success.



- He states we need to tell them what they need to know for success and show them how to do things they must be able to do for themselves.
 The purpose of why we do things and the need to learn or focus on this context must be real to the learner for true engagement.
- Marzano also highlights the importance of giving examples and nonexamples (similarities and differences) of the concept you are teaching.



What the skills/ knowledge I know I can use for this new learning task/ activity/ inquiry?

What skills/ knowledge that I think I don't know?

What I know well (and can apply independently) surface to deep Transfer
What skills
can I transfer
to this new
learning?
What skills
can I use that
are similar?

What explicit skills will need to learn and inquire about that build on from skills I already know?

Make it visible - exemplars, rubrics

* A good resource to explicitly teach deeper levels of understanding is by using graphic organisers. Graphic organisers enable to show how different ideas were related to each other, e.g. steps, cause-effect, hierarchy, lists, comparisons, etc.

3: (Surface/ Deep)

Learner Lens -

Taking to the learning expedition with focus.

Get the Students to Engage With the Content.

Power of curiosity and creativity. Students need to engage with the content as soon as they hear it. We need to inspire curiosity in what we do to enable our students to creatively use the information or skills for their growth and purpose. Not to replicate our teacher thinking. As Ken Robinson stated in his famous speech 10 years ago, schools are killing creativity **Ken Robinson's talk-Do schools kills creativity**



So how can we develop this balance and go deeper to transfer to stretch thinking and empower new curiosities? By:

- Teachers sharing how to be successful by using exemplars, equipment and models. Students exploring the models and exemplars and then collaboratively forming together the success criteria.
- Adding new information to what they already know, or using it to clarify some
 of the faulty assumptions they currently hold.
- Practising and rehearsing skills this includes conversing about what they are doing and why they are doing (self talk). Deep learning occurs when students are openly sharing and questioning themselves on what they are doing and why they are doing it.
- Students then taking the surface and consolidation of knowledge and skills and then having the license to extend and stretch further with their ideas and thinking into new areas of curiosity and creativity. Time to PLay and Explore
- At RPS we are starting to use the following 3 questions

*reference from Tony Burkin- (mentor)

What is going well?

Why

What evidence do you have to justify this?

What isn't going well?

Whv

What evidence do you have to justify this?

How can you influence what is not going well?

What are your scaffold next steps?

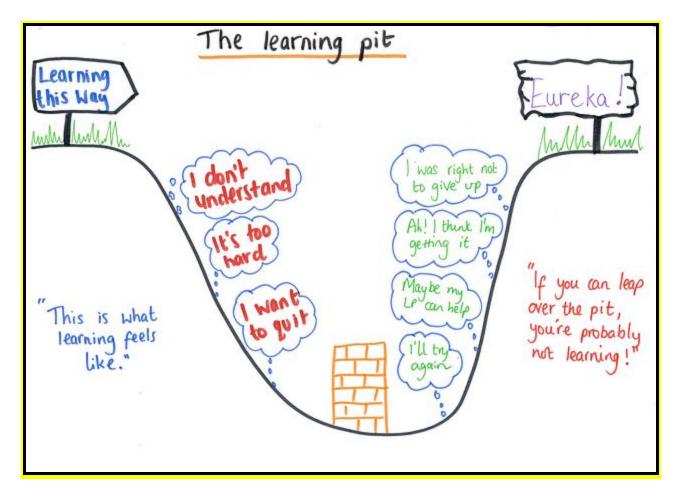
- Skill
- Will

What are you aiming for?

Thrill

This forms learning pit* James Nottingham -





4: Deep learning- self regulation, self talk

Effective Communication

Feedback

- Students need to be given feedback while there is still time to improve *i.e.* before finishing a topic or assigning a formal assessment task.
 - understand that the students feedback to teachers helps to improve lesson design (0.75 effect size)
 - collect data from your students so that you can hear their understandings of their learning journey

*Copy of slide from T4 Professional Learning Session (D Dickson/ S Graham)

Professional Learning presentation slides T4 2015

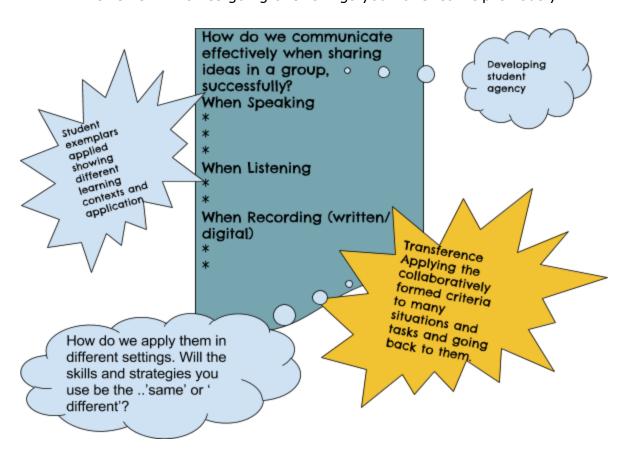
 John Hattie states that novice or struggling students need immediate feedback, while more experienced students do better when they receive delayed feedback. Hattie also discovered that different types of students



need distinct types of feedback.*Refer to: How to Give Feedback: The Advanced Guide 2016 link inserted into the appendix section

5: Multiple Exposures (Surface / Deep)

- If you want students to internalise new information, you need to expose them to it several times.
- Critical importance of techniques such as *rehearsal* and *review*. Put simply, rehearsal means going over material until you can remember it, while review involves going over things you have learnt previously.



6: Apply Skills and Knowledge (Transfer)

- Apply their knowledge deepens their understanding
- Can the plan and Evaluate through:
 - Self regulation
 - Feedback
 - Rehearsal and practice the skills to new settings
 Can they self assess where they are?



- Have they noted the shift to their learning by being explicit
- Are we as teachers measuring this important shift (skills and attributes in a transforming world?) Do we value the importance or are we fixated on the test results and outcomes?

Students use what they have learned



To solve real problems and dilemmas

7: Collaborative Practice - Students Working Together and driving their thinking and learning (Transfer)

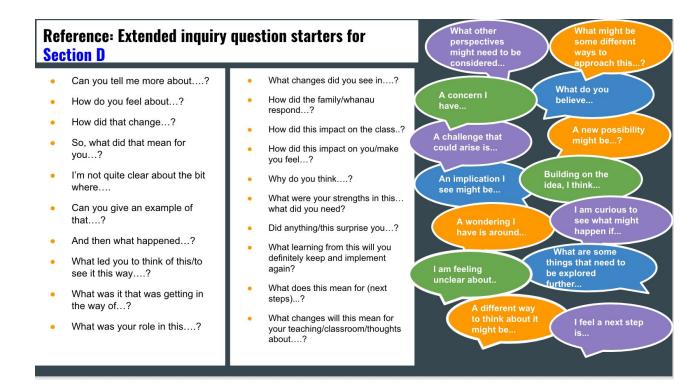
- Working cooperatively
- Hattie highlights how students need you to use topic-related facts and skills, so they can make genuine contributions to their group. If students haven't gained sufficient mastery of the material, they cannot actively participate in cooperative learning tasks.
- Modelling and collectively creating a collaborative environment (defining the different between collaboration and cooperation)
 - Environments need to provide collaborative opportunities be open and responsive.
 - Spaces encourage a collaborative atmosphere
 - Social Competencies need to encouraged and taught on how we collaborate including how learners:
 - Share ideas
 - Work through aspects that they agree and disagree on (points of view)
 - How to work through a process to form a collaborative decision.

8: Build Students' Self-Efficacy (Outputs and Deep Learning)

 Hattie & Marzano both found that students' self-efficacy had a substantial impact on their subsequent achievement.



- Students who believed they would master the skills set were more likely to do so, while students who saw themselves as not being able too, were less likely to.
 - So how can we model this as teachers by sharing our teacher inquiry with them- including student feedback and getting them involved in reflecting the impacts. Example questions we are developing below:





In Summary

From Hattie: Similarities and Differences

The skill of being able to identify similarities and differences between tasks or topics and learning situations is one of the most powerful of all the learning strategies approaches studied. This is particularly important and useful when you want learners to transfer the learning from one context to a new one. Learners often don't take the time to think about what is similar or different between tasks or situations and will frequently assume that the that the new problem/task is the same as a previous one. This means that they fail to notice important differences that affect how they should approach the problem. The overall effect size for emphasising finding similarities and differences is 1:32 when used in the 'transfer' phase of learning.

* Copy of slide from T4 Professional Learning Session (D Dickson)



I know it is a journey ahead, and we need to recognise the importance that ongoing change and development takes time to be embedding deeply.

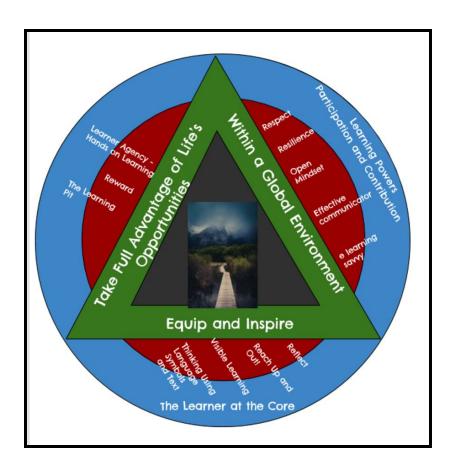
As leaders we need to keep the student at the centre and really look at:

- WHY we are doing this?
- HOW are we doing this to ensure transfer?
- WHAT practices we are using to ensure deep, engaged learning is happening.

We need to not be influenced by more is better, rather we need to recognise the importance of what inputs we build and grow our learning and really go deeper with these.

Keep it real, keep it explicit, keep it refined and user friendly for all (students, teachers and community).





References

Atkin, J From Values and Beliefs about learning to Principles and Practice 1996

Claxton, G Educating Ruby 2015

Dunlosky, J Improving students learning with effective learning techniques 2013

Fedal, C; Bialik, M; Trilling, B Four Dimensional Education the competencies learners need to succeed 2015 Boston The Centre of Curriculum redesign

Fullan, M

Hattie, J Learning Visibly- the Science of how we learn paper August 2015 Cognition

Hattie, J - Research Files Episode 10: May 2015

NZCER report to the Ministry of Education in 2012 – "Supporting Future-oriented Learning & Teaching - a New Zealand Perspective"



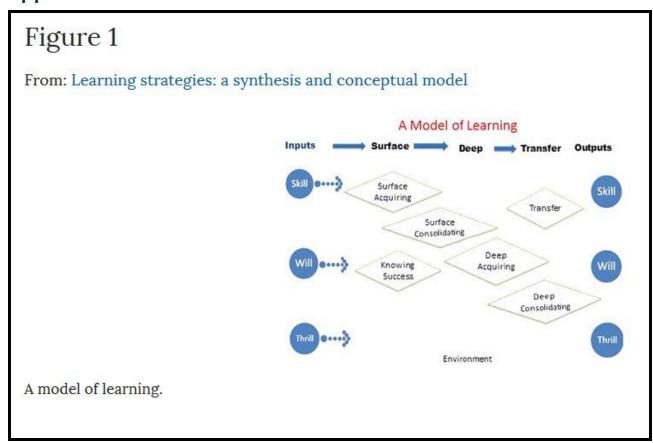
Timperley University of Phoenix

Essential Skills for the Successful 21st Century Worker

http://www.educatorstechnology.com/2015/04/10-essential-skills-for-21st-century-learners.html

Use of images: Unless stated otherwise the images in this report have been sourced from the internet and are made freely available for reuse.'

Appendix



Latests Visible Research / Transference Feedback

- http://visible-learning.org/2016/07/ask-professor-john-hattie-a-question/
- https://www.amazon.com/Visible-Learning-Literacy-Grades-K-12/dp/1506332358/ref=sr_1_2?s=books&ie=UTF8&qid=1484817389&sr=1-2
- https://www.amazon.com/Teaching-Literacy-Visible-Learning-Classroom/dp/1506332366/ref=sr_1_4?s=books&ie=UTF8&qid=1484817594&sr=1-4



5 Tools for Student-Driven Learning eduwells.com/2016/12/ 10/5-t... via @wordpressdotcom

*How to Give Feedback: The Advanced Guide). http://www.evidencebasedteaching.org.au/how-to-give-feedback-to-students/