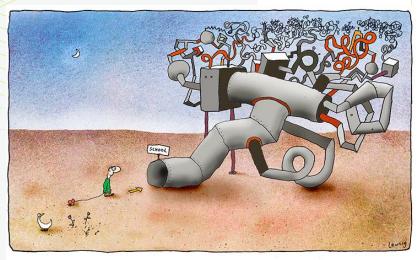


Navigating Change in Education

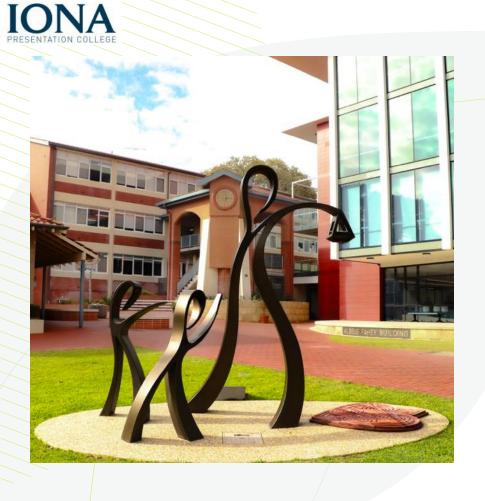
Integrating research finding and efficacious pedagogical practices



Saturday, 08 February 2014

Sharon Schubert
NEAA Conference, 2023
Honouring the past, Inspiring the future

Honouring the Past, Inspiring the Future



"In the face of fear, she chose to be daring,

In the face of anxiety, she chose to trust,

In the face of impossibility, she chose to begin.

What will you choose to do?

Woman of Hope Sr Raphael Consedine (2001)



Learning Intentions

(Explicit)

ONA ESENTATION COLLEGE

By the end of the workshop teachers will understand :

- Why there has been a paradigm shift in education.
- Characteristics of the Alpha Generation and how educators need to adapt their teaching practice to engage them.
- The importance of context and reflective practice in leading change.
- Why we need to align change with school context.
- How to gather and use data to drive change.
- Learning is Improvable, Visible and Measurable.
- How to use a framework for improving student outcomes (FISO).
- The Science of Learning
- Rosenshine's Principles of Instruction
- Cognitive Load Theory and how to manage manage cognitive load.
- How to engage the Alpha Generation
- How to use High Impact Teaching Strategies to improve student outcomes.
- How to Cultivate a Growth Mindset
- How to harness Character Strengths
- Importance of Creating a Student-Centred Learning Environment



2023 Context





Paradigm Shift in Education

IONA PRESENTATION COLLEGE

The impact of the COVID-19 pandemic on education International evidence from the Responses to Educational Disruption Survey (REDS) Resent attains.

THE IMPACT OF THE COVID-19 PANDEMIC ON EDUCATION - UNESCO (2022)

- Provided an opportunity for developments, innovations, changes, and improvements that may endure into the future.
- Nearly all teachers in all countries believed that new approaches to teaching and learning will be important in the future, indicating a remarkable openness of teachers for innovation within their profession
- Teachers claimed, an increased shift in focus to student well-being was necessary revealing this is an issue with high emphasis in times of crisis, acknowledging the the interrelation between students' well-being and learning progress.
- Created a unique opportunity for educational changes that hav been proposed before COVID-19 but were never fully realized.

FACTORS DISRUPTING EDUCATION IN 2023 - Criddle

- Artificial intelligence and technological change
- Individualisation of learning
- Mental health and wellbeing
- Teacher Burnout



Essentially, the new paradigm consists of core competencies that integrate learning and wellbeing.



Alpha Generation

- 'Screenagers' born in 2010.
- True digital natives 'logged on and linked up'.
- Most materially endowed and technologically literate generation.
- Sometimes known as 'Upagers' because physical adolescence will start earlier, and so will their social, psychological, educational and commercial sophistication.





Nurturing Generation Alpha Learners

Educators can create dynamic learning environments to engage and support Generation Alpha students effectively.

Focus on developing:

Digital Literacy:

Develop digital literacy skills for navigating and evaluating online information.

Critical Thinking, Problem Solving Skills and Metacognition:

Encourage students to reflect on their learning processes to prepare for complex challenges.

Personalize and Integrate Learning:

- Create flexible and purposeful learning experiences.
- Tailor instruction to individual needs and interests
- Encourage cross curricular learning to facilitate authentic, real-world connections.

Collaborative Learning with Technology

• Leverage the power of technology and collaborative learning to facilitate digital interactions, virtual connections, and creative projects.

Social-Emotional Learning Strategies (SELS)

Enhance empathy and positive interpersonal relationships, and cultivate self-regulation and goal setting





Educational Change



Leading Impactful Change in a Changing World

Change requires an awareness of context, as well as the intent, of the change.

Educational change is a necessity; it must address emerging issues and challenges in order to focus on the needs that arise with changing contexts.

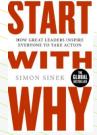
Understanding of context gives new perspective and allows effective strategies to be implemented to support the achievement of intended goals and objectives.

As schools we need to recognise this 'big shift' and adjust our teaching and learning strategies to prepare our Alpha students for the future, whatever that may hold.

There are many opportunities ahead of us — the challenge now lies in how to place ourselves to take advantage of them.



Importance of Context and Reflective Practice The Golden Circle





By understanding their particular context teachers can align their Why," "How," and "What" to foster a positive and inclusive learning environment, where students feel connected to the purpose of their education and are motivated to achieve their full potential.

"Why?"

- Articulate the purpose and motivation behind teaching.
- Clarify goals to establish a clear vision and direction for teaching practice.

"How?"

- Align strategies with educational goals.
- Understand the context: specific needs, preferences, and backgrounds of students as can significantly influence the chosen teaching strategies.
- Use instructional approaches to better resonate with students and create meaningful learning experiences.

"What?"

- Consider what specific content and curriculum will be delivered.
- Understand the context, the unique characteristics of the students and the learning environment when selecting and designing curriculum materials.



Reflective Practice and Educational Change

Why? (Purpose)

Reflective practice helps to build mastery and expertise

How"? (Process)

- Understand the Science of Teaching
- Explore contemporary, research-driven High Impact Practices (HITS)

What? (Outcome)

• Incorporate evidence based instructional practices to achieve a positive impact on student achievement (Hanusheck, 2002, Leigh, 2008, and Hattie, 2003)



Aligning Change with Context



Why do we need to align Change with Context?

Relevance

e Ensures that it is meaningful and applicable to the unique needs of the community.

Stakeholder Buy-In

 Increases support and participation from teachers, students, parents, and administrators.

Impact on Student Learning and Outcomes

Maximises the potential positive and meaningful impact

Sustainability

 Changes are more likely to withstand challenges and thrive over time.





Aligning Change with Context Iona Presentation College

WHY?

We believe:

- Early years of childhood are the times for developing healthy, respectful and collaborative relationships.
- Junior and Senior Schools having their own distinct learning settings,
- Our students enjoy being part of a strong united community,
- Role modelling and leadership responsibilities and opportunities should be available to all students.

How?

We do it through:

- Service to Others
- Academic Excellence
- Teachers Who Inspire
- A Support Network that Spans the Community
- Latest Technology
- Solid Sporting Reputation
- Great Co-curricular Choices

What?

We provide

- An outstanding teaching and learning environment
- Excellent Location and Transport Iona ticks the Boxes
- A strong connection to the College and to each other through the Iona Past Pupils' Association (IPPA).



Aligning College Strategic Plan with Vision for Learning



To build and grow a well-resourced professional learning community.

EVIDENCE BASED DECISION MAKING To adopt an evidence based planning and decision making process so to cultivate a contemporary learning environment.

FINANCIAL SUSTAINABILITY

To explore and implement strategies to ensure financial sustainability, good governance and compliance into the future

To inspire faith filled relationships that reflect Gospel values and Catholic Social Teachings of human dignity, solidarity and the common good.

CALL TO FAITH To deepen the understanding and appreciation of the Presentation Charism and its call to action.

CALL TO GROW IN DISCIPLESHIP To form all community members in spiritual awareness, theological understanding, vocational motivation and capabilities for mission.

To foster the personal development and growth of all community members agile lifelong learners who are curious. so to discover their full potential. creative and critical thinkers in an everchanging world. WELCOMING AND INCLUSIVE ENVIRONMENT

To promote a welcoming, connected and sustainable community that celebrates

relationships within the Iona community

and beyond.

To foster a Christ-Centred diversity, encourages inclusivity and Pre-K to 12 community where all student voice. members contribute to a collaborative learning environment. **BUILDING PARTNERSHIPS**

Continue to grow and foster strong

To cultivate contemporary pedagogical practices that enables all members to be challenged.





Data Driven Change



Techniques to Gather, Analyse and Use Data for Change

The Golden Circle

Why: Purpose

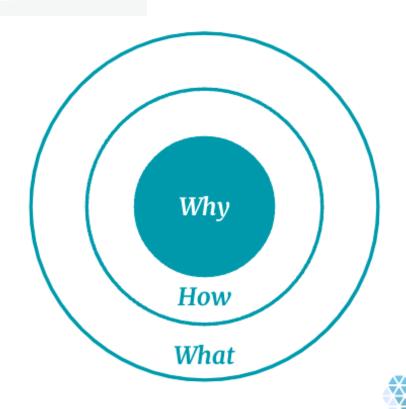
What is your cause? What do you believe?

How: Process

Specific actions taken to realize your Why.

What: Outcome

What do you do? The result of Why. Proof.





Why Data Should Drive Change?

Rich triangulated data assists schools and educators to:

- Make Well-Informed Decisions regarding student progress and instructional strategies.
- Personalise Learning Experiences by tailoring instructional approaches according to individual student needs and strengths
- Cultivate a Culture of Continuous Improvement/Growth by promoting learning environments that encourage
 ongoing evaluation and refinement of teaching practices
- Optimise Resource Allocation by identifying areas of need and low performance
- Promote Accountability and Transparency
- Implement Evidence-Based Strategies to maximize student outcomes and learning efficacy.
- Devise Strategic Long-Term Planning
- Improve Student Outcomes through targeted interventions and personalised support.



How Do We Collect Data?

Data must be triangulated in order to gain comprehensive, accurate and deep understanding of students' strengths, challenges, needs and learning progress.

- Formative and Summative Assessments: Use ongoing formative assessments to gather real-time feedback on student understanding.
- Performance Tasks: Assign authentic tasks to gauge student knowledge and skills.
- Standardized Tests: Utilize standardized assessments to measure student proficiency.
- Classroom Observations: Observe students to assess engagement and behaviour.
- Student Work Portfolios: Create portfolios to track individual growth and achievements.
- Surveys and Feedback: Collect student input to understand learning experiences.
- Learning Management Systems: Use digital platforms to track student progress.
- Data Analysis Tools: Utilize software for efficient data processing.
- Parent-Teacher Conferences: Engage parents to discuss student performance.
- Collaborative Data Analysis: Foster a team-based approach to data interpretation and decision-making.



What Can We Do With Data?

- Discern Patterns and Trends related to student performance.
- Derive Meaningful Insights that can inform instructional decisions and identify areas for improvement.
- Identify Areas of Need
- Plan Targeted/Differentiated Interventions to cater to diverse student learning capabilities.
- Set SMART Goals to enhance student progress.
- Provide Timely/ Constructive Feedback to support growth and improvement.
- Create Collaborative Learning Communities with colleagues to share data insights and best practices.
- Encourage Parent Engagement to foster a joint commitment to student success.
- Monitor Student Progress to evaluate the effectiveness of interventions.
- Engage in Reflective Practice to refine instructional strategies and optimize teaching and learning experiences

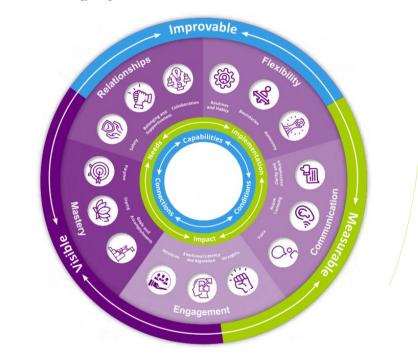


Implementing Change



Learning is Improvable, Visible and Measurable

The diagram below, adapted from The Flourishing Classroom System Observation Framework,23 illustrates the strategy design.





Learning is Improvable...



If there is a fit between the person, the group and their context (CEWA, 2021)

CAPABILITIES

Relate to:

Knowledge, attitudes, skills and behaviours which reside within students, educators, school leaders, parents and families.

Improved through:

Learning and practice.

CONNECTIONS

Relate to:

Healthy and respectful relationships.

Improved through:

High levels of physical and psychological safety, and sense of belonging

CONDITIONS

Relate to:

The group, classroom and school environment.

Improved through:

School leadership, teacher practice design and function of learning spaces.



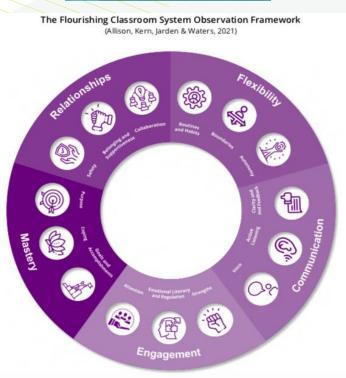




Learning is VISIBLE...

Elements act in synergy with each other and have an accumulative affect









Learning is Measurable...

An 'outcomes first' approach... first identifying the problem that needs solving or the solution being sought.

(CEWA, 2021)



NEEDS

Are identified by reviewing or collecting school data

IMPLEMENTATION

Is examined and ensured through high implementation fidelity.

IMPACT

Is evaluated and reviewed to determine the effects, outputs and outcomes of the approach. (self reporting, observation, response o intervention, school data and climate data)



Impact is measured through the voice of the stakeholders

Impact is evaluated and reviewed to determine the effects, outputs and outcomes... This may be measured through self-reporting, observation, response to intervention data, school data, climate data and wellbeing data.

(CEWA Strategic Wellbeing Framework, 2021)

Prior to implementing a program establish a starting point against which the impact of the intervention can be measured.

- Collect baseline data on the current wellbeing and academic achievements of the students in the pilot program.
- Data needs to be relevant to objectives and outcomes of the program.
- Qualitative or quantitative data such as surveys, test scores, focus groups or interviews.

Implement the program

- Ensure regular and continuous monitoring of progress through data parent, student and teacher voice.
- Document the program activities and any changes or modifications made during this stage

Evaluate the impact

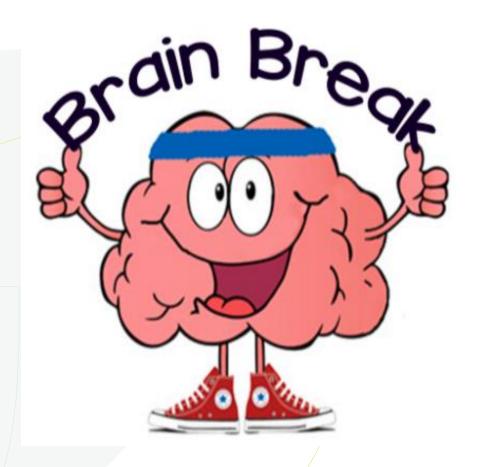
- Review implementation fidelity to optimise effectiveness
- Assess whether school systems and process fostered alignment with objectives and intentions
- Analyse the data to identify any trends and patterns
- Foster a culture of engagement by encouraging and valuing stakeholders' feedback by creating opportunities for open dialogue and channels for feedback
- Provide and use multiple platforms to gather stakeholder's voice where they can share their thoughts, concerns or ideas about the program

The diagram below, adapted from The Flourishing Classroom System Observation Framework, illustrates the strategy design



B | CEWA Strategic Wellbeing Framewo













The Science of Learning





Learning Science Principles

Deans for Impact

Learning Science Principles and Teacher Actions

Connecting the Dots



Students learn new ideas by reference to ideas they already know. Managing the Learning Load



Learning can be impeded if students are confronted with too much information at once.

Deepening Meaning and Learning



Students should think about meaning when they encounter to-be-remembered material. Practicing with Purpose



Practice is essential to learning, but not all practice is equivalent. Building Feedback Loops



Effective feedback is essential to acquiring new knowledge and skills. Creating a Motivating Environment



Students will be motivated to learn in environments where they feel safe and valued.

 \mathbf{T}

Teachers prompt students to call up important prior knowledge and explicitly connect it to new ideas Teachers
intentionally
sequence tasks to
include opportunities
to build foundational
concepts before
moving on to more
advanced tasks

Teachers
scaffold student
understanding
through carefully
designed
instruction that
includes modeling,
explanation, thinking
aloud, and worked
examples

Teachers' questions and tasks require students to focus their attention on the meaning of content

Teachers' questions and tasks require students to engage in effortful thinking

Teachers prompt students to connect (and distinguish) varied examples and contrasting nonexamples Teachers space and interleave practice opportunities to assist students in building automaticity

Teachers
provide students
targeted practice
opportunities with
specific feedback on
their work

Teachers foster an orientation toward improvement, not performance

Teachers surface the voices, ideas, and opinions of all their students and show that these are valued



Rosenhine's Principles of Instruction

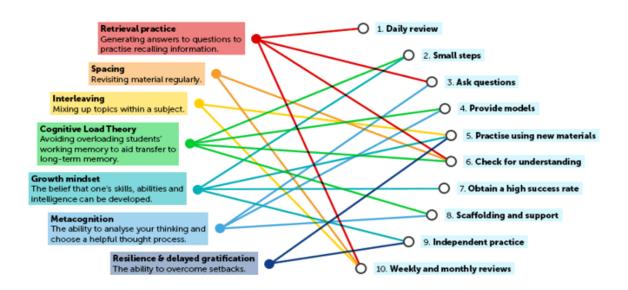
by @Inner_Drive | innerdrive.co.uk Rosenshine's 10 Principles of Instruction 1. Review learning 2. Present new material in small steps. at the start. 📂 3. Ask lots of good 4 Provide models and questions. worked examples. 6. Check for Practise using the understanding. new materials. 8. Provide scaffolding 7. Obtain a high and support. success rate. 9. Encourage 10. Weekly and independent practice. monthly review



Cognitive Science and Rosenshine's Principles of Instruction

The cognitive science behind Rosenshine's Principles of Instruction

by @Inner_Drive | innerdrive.co.uk





Visible Learning: The Sequel

(Hattie 2023)

Confidence	ES	Motivation	ES
Self-efficacy	.66	Deep motivation	.57
Self control	.49	Strategic motivation	.42
Positive self-concept	.47	Motivation	.40
Well-being	<mark>.36</mark>	Mastery goals	.15
Grit	<mark>.30</mark>	Performance goals	<mark>.03</mark>
Growth vs. fixed mindsets	<mark>.15</mark>	Surface motivation	14
Stress	<mark>14</mark>		
Anxiety	43		
Erustration	- 52		

Engagement	ES
Engagement	.54
Enjoyment	.56
Happiness	.53
Attitude content domains	.46
Mindfulness	<mark>.26</mark>
Exercise	<mark>.18</mark>
Relaxation	<mark>.16</mark>
Lack of sleep	05
Aggression/violence	19
Depression	26
Boredom	33
Anger	82



Questioning

IONA

Factual Questions elicit specific information or facts
Purpose

Assess basic knowledge, facts or concepts eg...

Hinge Questions occur at a point in the lesson to check for understanding before progressing further Purpose

 Gauge whether a concept has grasped by the majority of students eg...

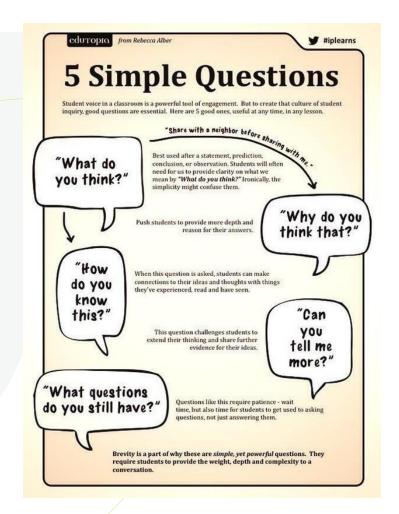
Process Questions focus on steps, procedures or strategies to solve or complete a task

Purpose

 Encourage students to think critically about their thought processes and problem-solving approaches eg...

Probing Questions are follow up questions designed to delve deeper into students' understanding and thinking Purpose

• Promote reflective thinking and encourage students to support their answers with evidence or reasoning...





Cognitive Load Theory



Cognitive Load Theory

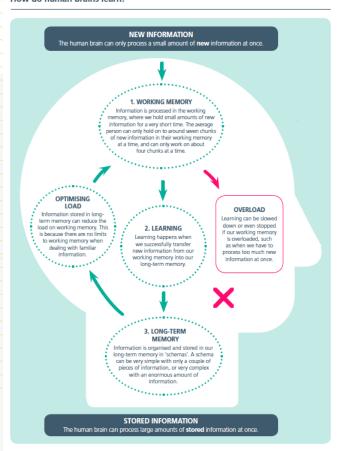
IONA
PRESENTATION COLLEGE

'The single most important thing for teachers to know'.

(Dylan William)

Centre for Education Statistics and Evaluation NSW 2017

How do human brains learn?







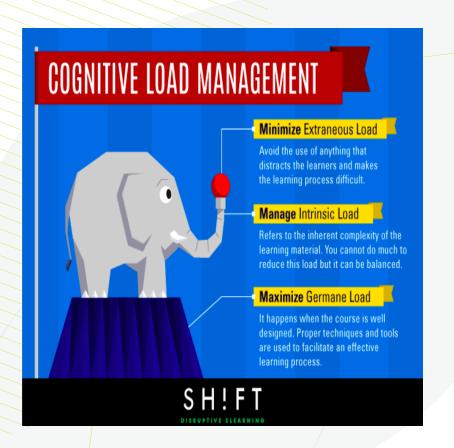
Managing Cognitive Load

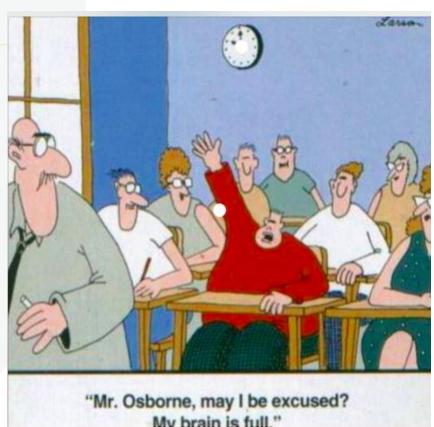






Barometer of Learning





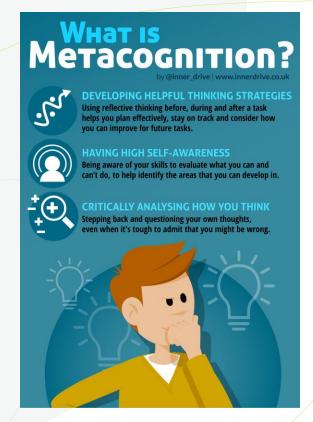


Metacognition



Metacognition

When we do purposeful thinking about our thinking we engage in "metacognition". It is a predictor and faciltator of independent, lifelong learning as well as critical thinking (NSW Department of Education 2020, Hattie, 2003)).





HIGH IMPACT TEACHING STRATEGIES



High Intensity Teaching Strategies

The Ten High Impact Teaching Strategies



Collaborative Learning



Differentiated Learning



Feedback



Explicit Instruction



Multiple Exposures



Metacognitive Strategies



Setting Goals



Questioning

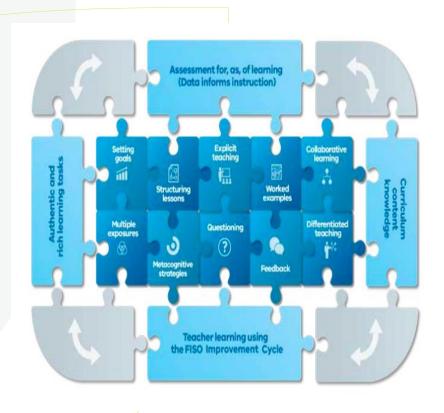


Structuring Lessons



Worked Examples







High Impact Teaching Strategies and affect size

VISIBLE LEARNING: THE SEQUEL (2023)

Confidence	ES	Motivation	ES	Engagement	ES
Self-efficacy	.66	Deep motivation	.57	Engagement	.54
Self control	.49	Strategic motivation	.42	Enjoyment	.56
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Growth vs. fixed mindsets	.15	Surface motivation	14	Exercise	.18
Stress	<mark>14</mark>			Relaxation	<mark>.16</mark>
Anxiety	43			Lack of sleep	05
Frustration	52			Aggression/violence	19
				Depression	26
				Boredom	33
				Anger	82

Updating

Impact of teachers

Mind frames

Within classrooms

Focus on learning



DIFFERENTIATION

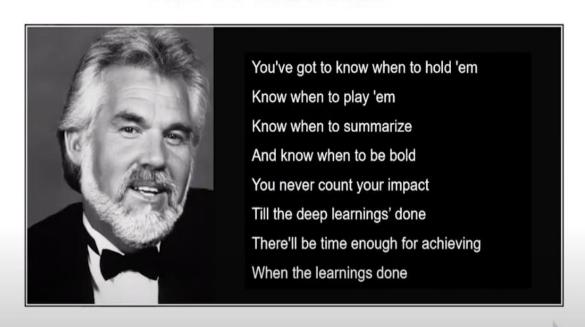
VISIBLE LEARNING: THE SEQUEL (2023)

Differentiation - teaching methods Combination notes, pictures summary Pictorial notes and pictographs Surface Summarizing & notebook review Acquiring Across all phases Frequent structured practice Practice sessions prior to testing Jigsaw Think logs Surface · Paiedia Consolidating Elaborative interrogation **Examining support for claims** Generating qualifiers Deep Identifying errors of attack Acquiring Grouping for active processing Peer response groups Student tournaments Deep Think-pair-share Consolidating Classification charts Transfer Dichotomous keys Sorting, matching, categorizing Student-generated classifica n patterns Updating Impact of teachers Mind frames Within classrooms Focus on learning



HOW WE LEARN BEST

The Kenny Rogers theory of How we Learn best!



Updating

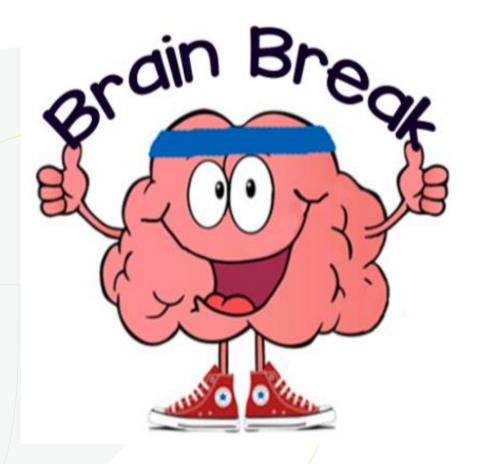
Impact of teachers

Mind frames

Within classrooms

Focus on learning







WELLBEING



Using Evidence Based Research to create Flourishing Classrooms

Provide students with the opportunity to develop individual Capabilities (Me) that enable them to Connect (We) through healthy relationships and relate in a positive and supportive Community (Us) context.

What we do well and can continue to do:

- Encourage students to share strategies and approaches to problem-solving.
- Promote collaboration and peer support.
- Foster constructive teacher and student feedback.

Using the FLOURISH acronym

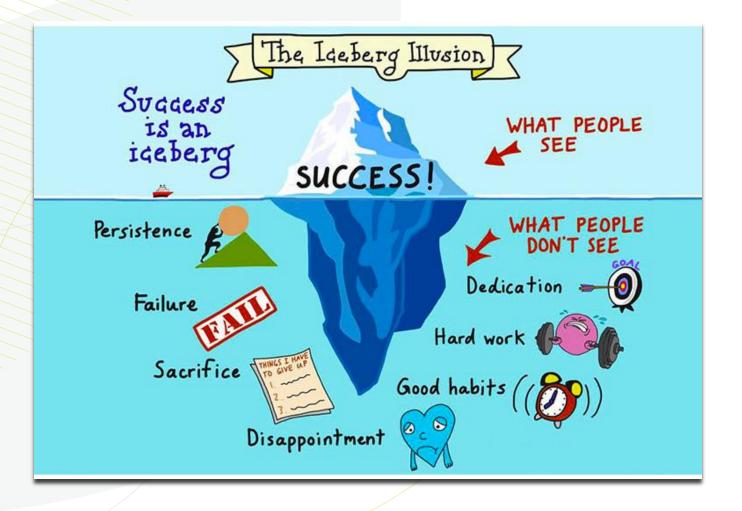
- F: Foster Growth Mindset
- L: Leverage Character Strengths
- O: Optimise Opportunities
- Uncover Potential
- R: Reflect on Progress not Perfection
- 1: Inspire others
- S: Strive for Improvement
- H: Honour Achievements

Explicitly teach Wellbeing Literacy through:

- Growth Mindset
- Character Strengths



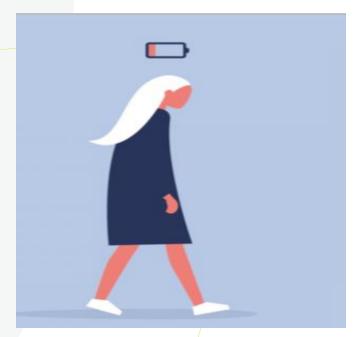
SUCCESS looks like...





The Struggle is Real







MINDSETS Growth vs Fixed

```
skills

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being best
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substitution being best
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Develop a GROWTH MINDSET

Create **learning goals**

Aim for mastery and competence

Ilike challenge. Even
if I have low
confidence in my
intelligence, I throw
myself into difficult
tasks and stick with
them. I set myself
goals and make sure
I have strategies to
reach them.

View scores as a reflection on how you are doing now and not your potential

Show an <u>increase in performance</u> and enjoyment and decrease in negative emotion





Mindset Triggers



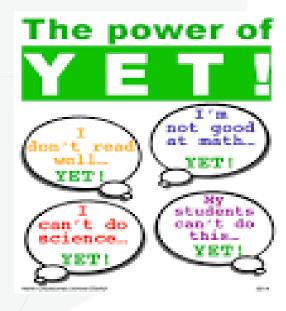


STRATEGIES

Be mindful about...

how you speak about yourself, your skills and your abilities

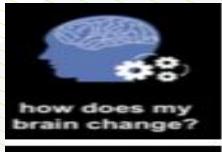
Name it to Tame it





What do we do?

Reflect on what we can do in our daily practice to develop and promote a growth mindset:



how do I grow?



- Your brain isn't finished growing YET
- 2. Practice makes progress
 - Comfort Zone
 - Struggle zone
 - Panic Zone
- 3. Watch your praise



Embrace the struggle without zoning out

Comfort Zone Struggle Zone

Panic Zone

Low challenge

Low stress

Limited thinking

Limited Learning High challenge

Low stress

Thinking required

Effective Learning High challenge

High stress

Cognitive overload

Limited Learning



WHERE IS YOUR...

Struggle zone
Panic zone





What to do when... you don't know what to do...

things to remember when you get stuck





Character Strengths

"People grow through experience if they meet life honestly and courageously.

This is how character is built."

Eleanor Roosevelt



Character Strengths

What Makes Us Strong and Virtuous?





Name the Strength

Gotcha!

Today I saw you using a growth mindset to improve the character strength of:





Name the Strength

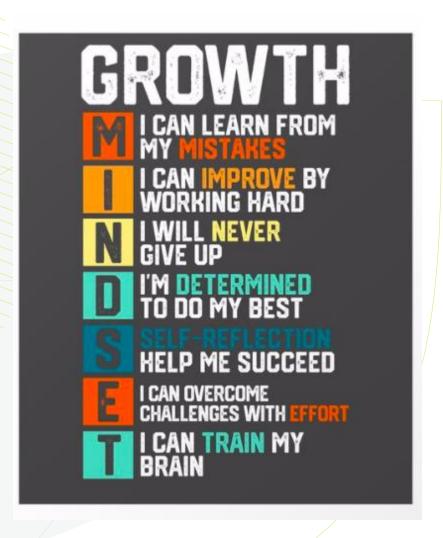


Gotcha!

You have been caught using your 24th Character Strength by:



Rememeber!





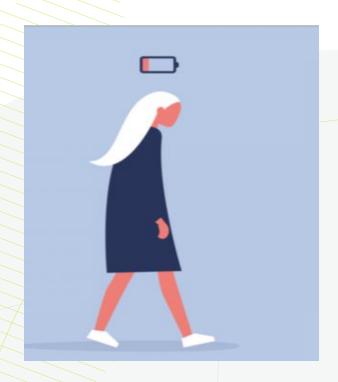
From this...to this...







From this...to this...







Learning Intentions

IONA PRESENTATION COLLEGE

By the end of the workshop teachers will understand :

- Why there has been a paradigm shift in education.
- Characteristics of the Alpha Generation and how educators need to adapt their teaching practice to engage them.
- The importance of context and reflective practice in leading change.
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- How to harness Character Strengths
- Importance of Creating a Student-Centred Learning Environment



QUESTION TIME





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