



## Foundation Day




Today's facilitator: Dr Shaun Hawthorne




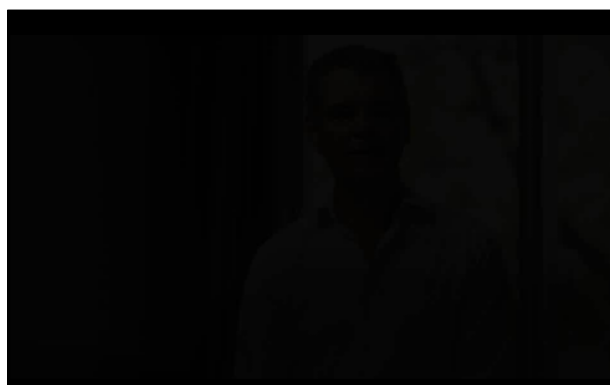
## Whakatauki

**Naku te rourou nau te rourou ka  
tupu ai te iwi**  
*With your basket and my basket  
the people will thrive*

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## Visible Teaching – Visible Learning

When teachers SEE learning through the eyes of the student



and when students SEE themselves as their own teachers

## Seminar outline

Session One - Intro. to Visible Learning research

Session Two – Visible LearningPlus Strands

- Visible Learners
- Know thy Impact
- Inspired & Passionate Teachers
- Feedback

Session Three - Mindframes

## Learning intentions

By the end of this session, you will:

- understand the key Visible Learning messages
- understand the key characteristics of the Visible Learning strands
- be able to make links between these messages and what happens in your school.

Workbook page 3

## Success criteria

At the end of the day, you can:

- articulate the key findings from the Visible Learning research
- articulate the key characteristics of the Visible Learning strands
- describe the Mindframes which have an impact on student achievement

Workbook page 3



## Discussion task

- What are the students able to do that surprised you?
- Are students in your school able to talk about their learning in similar ways?

Workbook page 4

Rank these six influences from greatest to least influence on student learning

- Ability grouping
- Feedback
- Teacher-student relationships
- Individualised instruction
- Mobility (shifting schools)
- Student expectations of themselves

Workbook page 5

And the order is:

1. Student expectations of themselves
2. Feedback
3. Teacher-student relationships
4. Individualised instruction
5. Ability grouping
6. Mobility (shifting schools)

## Session One:

The Visible Learning research



World's largest educational research



## The Visible Learning research How did it work and what did it say?

**VISIBLE LEARNING:**  
A SYNTHESIS OF OVER  
800 META-ANALYSES  
IN EDUCATION



Professor John Hattie  
The University of Melbourne  
Senior Research Consultant  
(Visible Learning<sup>plus</sup>)

- 800+ meta-analyses
- 50,000+ studies
- 250+ million students

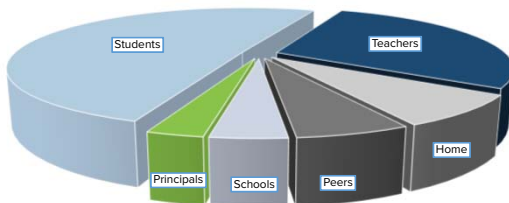
## All studies measured growth or difference

- Growth over time
- Difference between different aspects being researched

Three types of data collected:

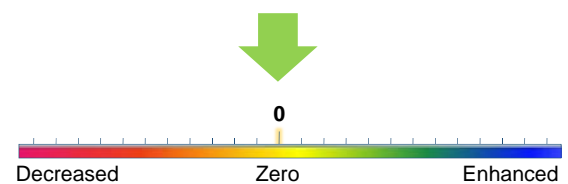
- Baseline and endpoint
- At multiple points
- Comparative

## Identifying what matters — percentage of achievement variance

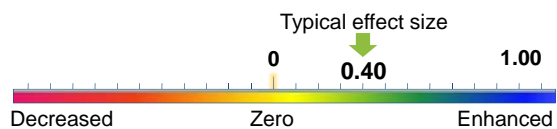


## An effect size

A common scale for measuring progress in student achievement



### Effect on achievement over time



### 95% of the research showed a positive influence on student achievement



### What works best?

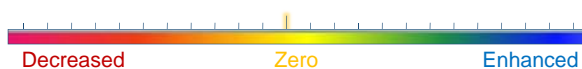


### The effect sizes for the six influences

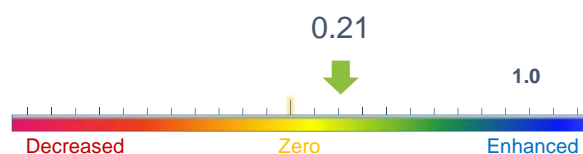
Rank	Overall ranking (in full research sample)	Effect size
Ability grouping	131	0.12
Feedback	10	0.75
Teacher-student relationships	12	0.72
Individualised instruction	109	0.22
Mobility (shifting schools)	150	-0.34
Student expectations of themselves	1	1.44

Workbook page 5

### What is the effect of reducing class size on achievement?



### Reducing class size



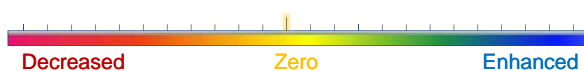


## How to read the effect size

Rank	Influence	Studies	Effects	Effect size
150	Mobility	181	540	-0.34

## What is the effect?

What is the effect of the different influences on student achievement?



Rank	Influence	Studies	Effects	Effect size
150	Mobility (shifting schools)	181	540	-0.34
148	Retention (holding students back a year)	229	2882	-0.13

Workbook page 9

Rank	Influence	Studies	Effects	Effect size
145	Open vs traditional learning spaces	315	333	0.01
136	Teachers' subject matter knowledge	92	424	0.09
131	Ability grouping (tracking/streaming)	500	1,369	0.12
125	Matching learning styles	244	1,234	0.17
120	Within-class grouping	144	209	0.18

Workbook page 10

Rank	Influence	Studies	Effects	Effect size
94	Homework	161	295	0.29
91	Inquiry-based teaching	205	420	0.31
73	Principals/school leaders	521	1,409	0.39
65	Cooperative learning	365	908	
58	Early interventions	1,704	9,369	0.41
51	Parental involvement	748	1,815	0.41

Workbook page 11

Rank	Influence	Studies	Effects	Effect size
94	Homework	161	295	0.29

**Primary 0.15**  
**Secondary school 0.64**

Workbook page 11

Rank	Influence	Studies	Effects	Effect size
47	Professional development	622	2,062	0.51
45	Socio-economic status	499	957	0.52
42	Classroom management	100	5	0.52
37	Student-centred teaching	19	19	0.54
32	Worked examples	62	151	0.57

Workbook page 12

Rank	Influence	Studies	Effects	Effect size
10	Feedback	1,310	2,086	0.75
9	Teacher clarity	39	110	0.75
7	Classroom discussion	42	42	0.82
6	Micro-teaching	402	439	0.88
5	Providing formative evaluation	30	78	0.90
1	Student expectations (of themselves)	209	305	1.44

Workbook page 13

### So... what matters most?

1. Teachers, working together, as evaluators of their impact
2. The power of moving from what students know now towards explicit success criteria
3. Errors and trust are welcomed as opportunities to learn
4. Maximize feedback to teachers about their impact
5. Getting the proportions of surface to deep correct
6. The Goldilocks principles of challenge, and deliberate practice to attain these challenges

### The Visible Learning story



### Visible Teaching – Visible Learning

When teachers SEE learning through the eyes of the student



and when students SEE themselves as their own teachers

## Reflection



## Session Two:

The Visible Learning strands



### Mindframes

Visible Learner    Know thy Impact    Inspired and Passionate Teachers    Feedback    Aligned Systems and Processes

Visible Learning research



### Mindframes

Visible Learner

Visible Learning research

Workbook page 15

## The Visible Learner focus questions

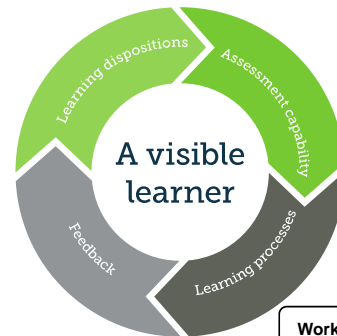
- To what extent do all students in your school exhibit the characteristics of a visible learner?
- What do your students think about learning and how we learn?



### Discussion task

- What did you notice about the characteristics of these learners?

Workbook page 15



Workbook page 16

Explains and understands progress  
Knows where they are at, where they are going and what their next steps are.

**A visible learner**



Workbook page 16

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



### Working memory





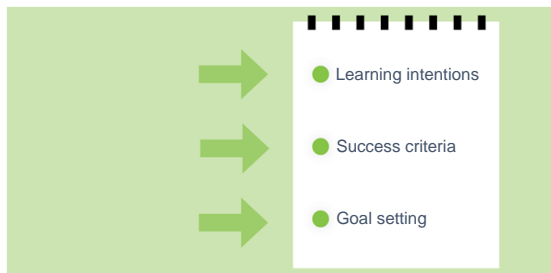
## Teacher clarity...



## Elements of Teacher Clarity - explained

1. Clarity of objectives – e.g. learning intentions, success criteria
2. Clarity of explanation – how well are these explained, discussed?
3. Clarity of demonstration – modelling, showing, exemplars
4. Clarity of practice – activities and tasks well chosen to ensure deliberate practice on the stuff that matters for this learning objective
5. Clarity of questioning – in order to assess what was learned or not & to help identify 'next steps' for learning

## Where am I going?



## Learning intentions

Describe clearly what the teacher wants the students to **know**, **understand**, and **be able to do** as a result of learning and teaching activities.

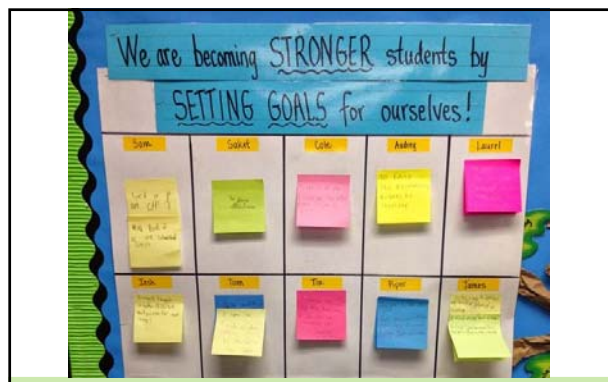
## Success criteria

- Are linked to the learning intentions
- They describe what success *looks like*
- They help the student and the teacher make judgments about the quality of student learning

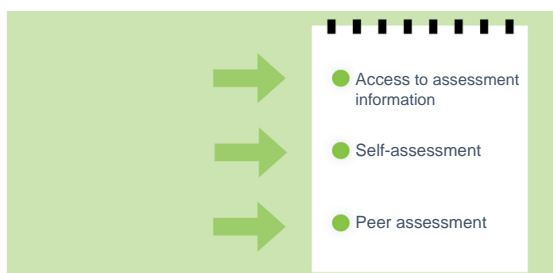


## SMART+ER goals

Specific  
Measurable  
Ambitious  
Relevant  
Timely  
Evaluate  
Re-evaluate



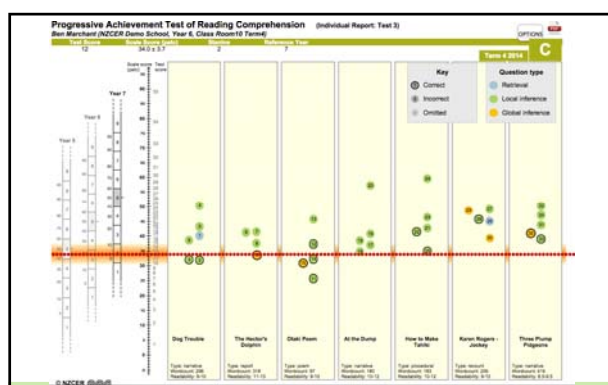
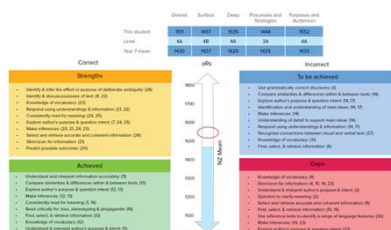
## How am I doing?



How do we or could we use assessment information with our students to develop their assessment capability?



## Learners use assessment information to review their learning and plan next steps





## Learner qualities – example

<b>Engagement</b> <ul style="list-style-type: none"> <li>Actively listens to others</li> <li>Asks appropriate questions</li> <li>Shares ideas and opinions</li> <li>Provides well thought-out answers to questions</li> </ul>	<b>Effort</b> <ul style="list-style-type: none"> <li>Perseveres and attempts difficult work</li> <li>Communicates with clarity, precision and accuracy</li> <li>Consistently strives to improve</li> <li>Creates and / or innovates using imagination</li> </ul>	<b>Responsibility</b> <ul style="list-style-type: none"> <li>Turns work in on time. Uses time effectively</li> <li>Uses technology appropriately</li> <li>Is organized and prepared to learn</li> <li>Takes responsible risks</li> </ul>
<b>Respect</b> <ul style="list-style-type: none"> <li>Follows school and class rules</li> <li>Shows respect for all people</li> <li>Manages impulsivity</li> <li>Advocates for self</li> </ul>	<b>Compassionate participation</b> <ul style="list-style-type: none"> <li>Cooperates with peers in an equitable and constructive manner</li> <li>Considers the opinions of others</li> <li>Reacts positively to others class discussions and group settings.</li> </ul>	

## GBHS Learner Profile



## Mindframes

Visible Learner

Know thy Impact

Visible Learning research

Workbook page 17

## Know thy Impact

- How do you know about the progress of students at individual, class, grade, or school levels?
- We need to think about our impact not just in terms of achievement but also progress.

“It is a way of thinking. My role ... is to evaluate the effect I have on my students. It is to 'know thy impact,' it is to understand this impact, and it is to act on this knowing and understanding”.

– John Hattie, 2012

Diagnose

Intervene

Evaluate

Teaching is  
To die for

### What tools do you use to measure progress?



Workbook page 18

Rubrics

Standardised tests

Pre/post tests

National tests



An effect size

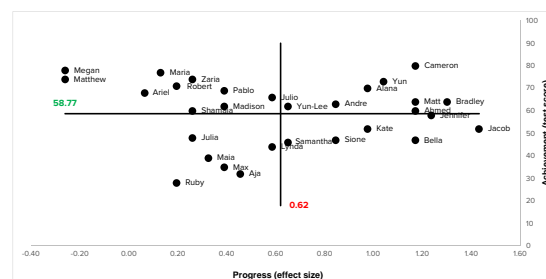


A common scale for measuring progress in student achievement

### There are many ways to measure progress

- Effect sizes (using standardised assessments)
- Effect sizes (using non-standardised assessments such as teacher-made pre- and post-tests)
- Monitoring learning progressions
- Student voice

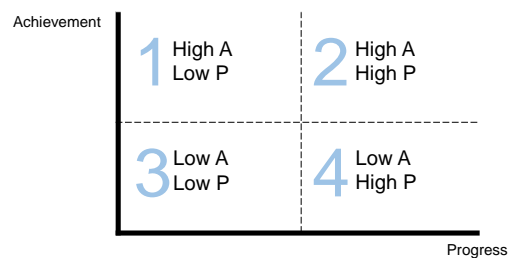
### Progress and achievement tool



### Using rubrics to measure progress

Beginning (1)	Developing (2)	Competent (3)	
Support required in planning and conducting survey.	Survey planned and effectively conducted.	Survey well-planned and effectively conducted.	2
An appropriate method of gathering and sorting data is not evident.	Some evidence of appropriate data gathering and sorting.	Uses an appropriate method of gathering and sorting data.	3
Limited graphing elements are present and used appropriately in data display.	A significant number of graphing elements are present and used appropriately in data displays.	Elements of graphing (e.g., axis labels, numbering) are present and used appropriately in data displays.	2
Limited accuracy in detecting and recording data conclusions, patterns and comparisons.	Most conclusions, patterns and comparisons from gathered data are accurate.	Accurate conclusions, patterns and comparisons are detected and recorded from gathered data.	1
Communicating findings clearly and accurately is a challenge.	Findings are presented with some clarity.	Findings are clearly and appropriately presented.	3
			11

### Student voice



Remember –  
the message is “Know thy Impact”,  
not “thou shalt calculate effect sizes”.



## Mindframes

Visible Learner

Know thy  
Impact

Inspired and  
Passionate  
Teachers

Visible Learning research

Workbook page 19

## Inspired teachers focus questions

- To what extent do the teachers in your school match the profile of inspired, impactful teachers?
- How deliberately are you teaching students to exhibit the characteristics of a visible learner?

What is your reaction to these students' stories?



Workbook page 20

What is your reaction to Silas' story?



Workbook page 20

List some of the characteristics of highly effective teachers



Workbook page 21

### The 7 Cs

- Care
- Challenge
- Clarity
- Captivate
- Confer
- Consolidate
- Control

### Expert and experienced teachers

- Is there a difference?
- How would you know?

### Expert teachers:

1. identify the most important ways in which to represent the subject that they teach
2. are proficient at creating an optimal classroom climate for learning
3. monitor learning and provide feedback
4. believe that all students can reach the success criteria
5. influence surface and deep student outcomes.

### Partner activity

Compare your list with the research evidence.

Workbook page 22



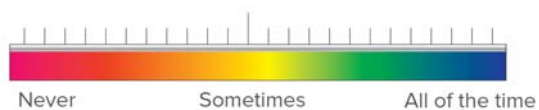
### Effective teacher profile?



Effective teachers talk to each other about student learning and the impact they have



### Personal checklist for Visible Learning



Workbook page 25



#### Mindframes

Visible Learner      Know thy Impact      Inspired and Passionate Teachers      Feedback

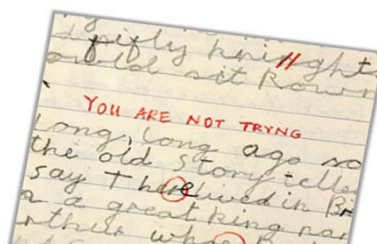
Visible Learning research

Workbook page 26

### Effective feedback focus questions

- What is the quality of feedback students in your school receive?
- What is the quality of feedback adults receive and who is this feedback from?

### Effective feedback?





“Effective feedback doubles the speed of learning” – Dylan William



## What is feedback?

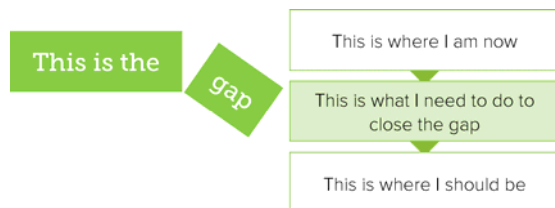
Feedback is just in time, just for me, information delivered when and where it can do the most good.

**FEEDBACK**

## Building your foundations for feedback

- What is the culture of feedback like in your school?
- Is it OK for teachers, students and leaders to say “I don’t know” or “I need help”?
- Who actively seeks, gives, and receives feedback in your school?

## The gap



## We give our students great feedback



... but do we know what they hear?

## A model for feedback

Workbook page 27



Do not confuse praise with instructional feedback



Give students feedback  
and feedforward

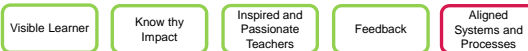
Reflection



Session Three:  
Visible Learning Mindframes



### Mindframes



Visible Learning research

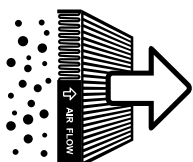
### Teachers' beliefs:

1. are implicit and explicit
2. exist along a continuum of stability
3. are activated by context demands
4. are interwoven with teacher knowledge
5. are best understood as integrated systems.

Five & Buehl (2012)

## Teachers' beliefs...

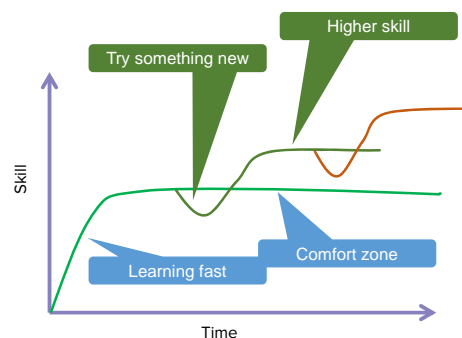
Filter



Frame



Guide



## I am an evaluator.

Workbook page 34



## I am a change agent.



Workbook page 35

## I talk about learning, not about teaching.



Workbook page 36

## I see assessment as feedback to me.



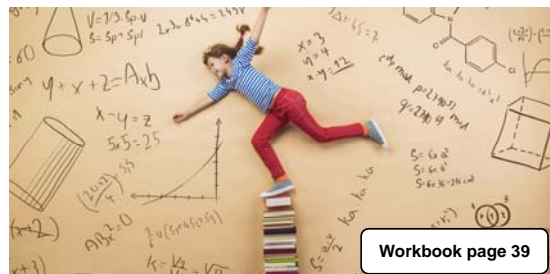
Workbook page 37

I engage in dialogue, not monologue.



Workbook page 38

I enjoy challenge.



Workbook page 39

I develop positive relationships.



Workbook page 40

I inform all about the language of learning.



Workbook page 41

I see learning as hard work.



Workbook page 42

I collaborate



### New # 1

Collective teacher efficacy ES 1.57

### Reflection



### Success criteria

At the end of the day, you can:

- articulate the key findings from the Visible Learning research
- articulate the key characteristics of the Visible Learning strands
- describe the Mindframes which have an impact on student achievement

Workbook page 3

### Evaluation online

To complete this workshop evaluation online, please use the link:

<https://www.research.net/r/VisibleLearningSurvey>

### Contact us

email: [shawthorne@cognitioneducation.com](mailto:shawthorne@cognitioneducation.com)



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