Visible Learning^plus
Cambridge Horizons
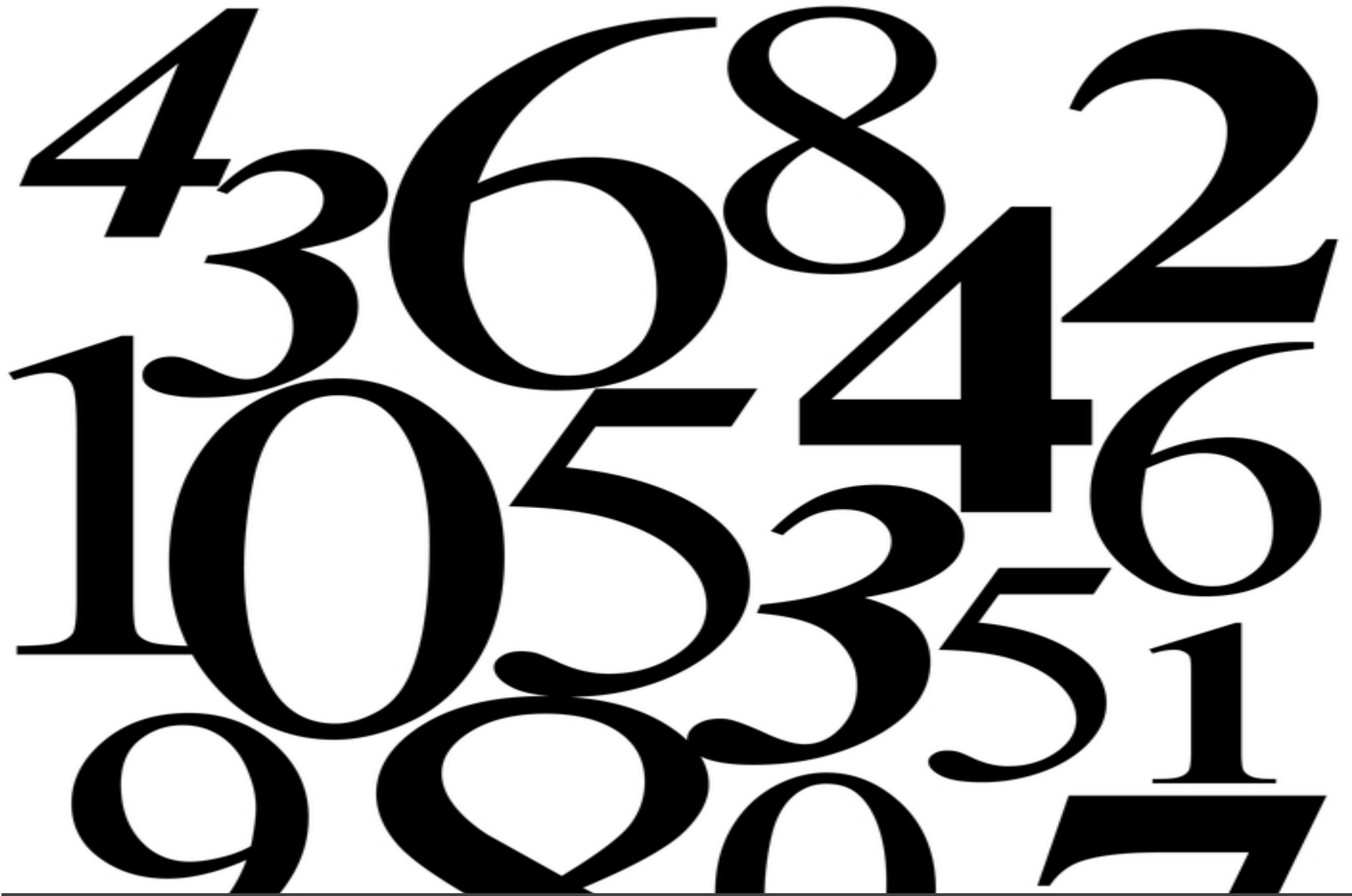
visible learning^plus

Visible Learning is about how we use numbers

Discussion task

In the video:

- What are the students able to do that surprised you?

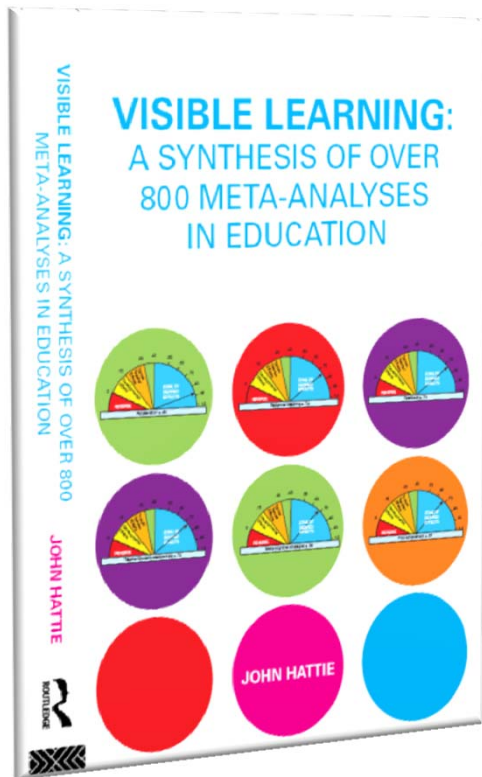- How do students in your schools discuss their learning?

visible learning[plus]

Visible Learning

What works best?

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

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

JOHN HATTIE

Professor John Hattie

The University of Melbourne
Senior Research Consultant
(Visible Learning[plus])

visible learning[plus]

The typical influence on achievement

So what is the typical effect across

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

visible learning[plus]
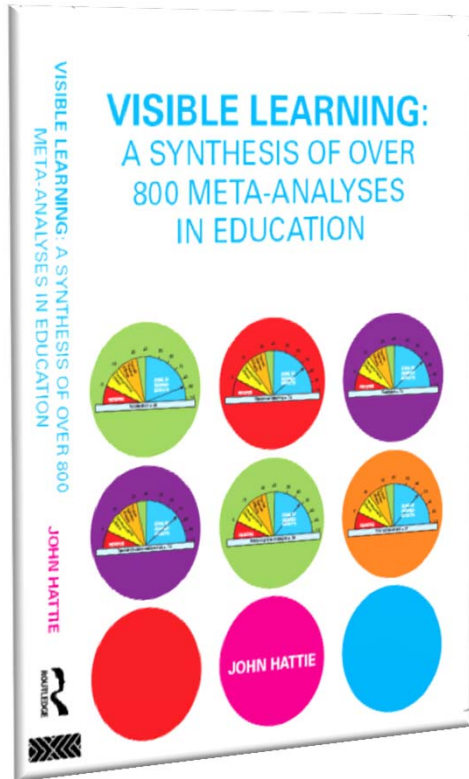
Student achievement

Three types of data collected

- Baseline and endpoint
- At multiple points
- Comparative

All studies measured growth or difference

128MB FlashMemory

visible learning^{plus}

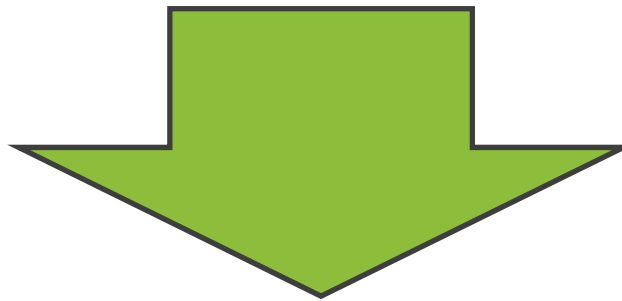Maths level

Reading tests
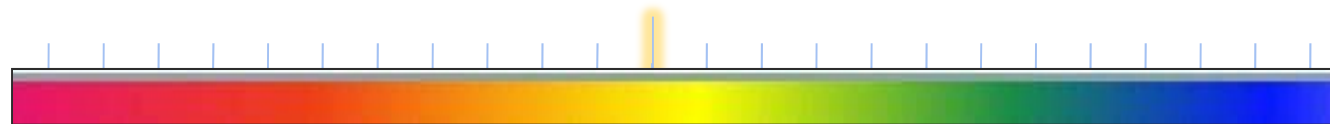
Pre/post maths test

National tests

An effect size

A common scale for measuring progress in student achievement

visible learning plus

The effect size common scale

0

Decreased   Zero   Enhanced

visible learning^{plus}
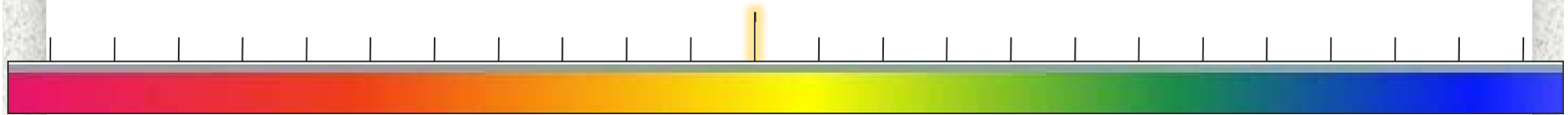
Effect on achievement over time

Typical effect size

0   **0.40**   1.00

Decreased   Zero   Enhanced

visible learning^plus

Influences on achievement

Reverse effects

Developmental effects

Typical teacher effects

Zone of desired effects

-0.10 0 0.10 0.20 0.30 0.40 0.50 0.60 0.70 0.80 0.90 1.00

visible learning^plus
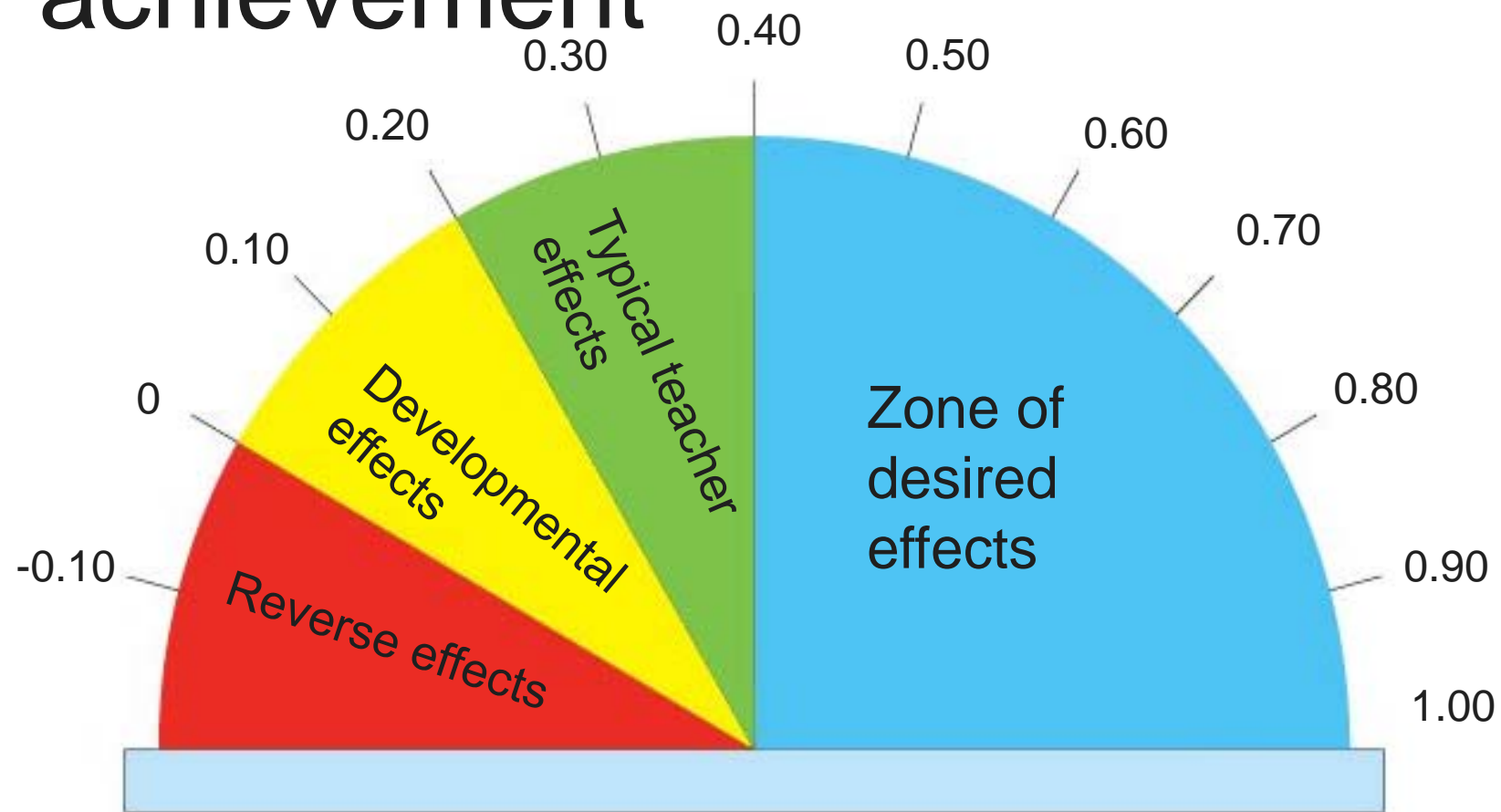
95% of everything from the research showed a positive influence on student achievement

Distribution of effects

visible learningplus
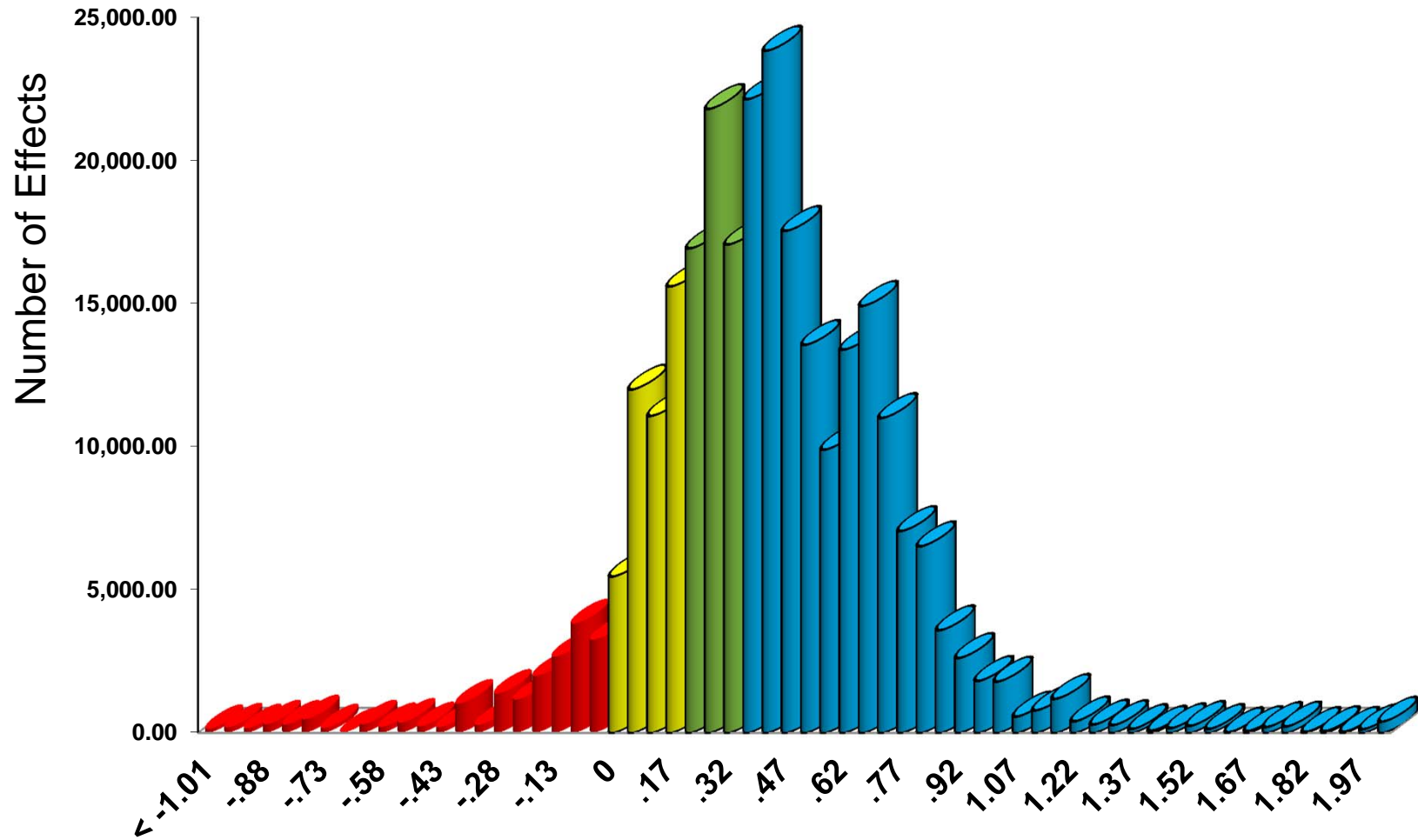
The Research Categories

The curriculum

The student

The school

The home

The teacher

The approaches to teaching

Rank	Influence	Studies	Effects	Effect sizes
150	Mobility	181	540	**-0.34**
148	Retention (holding students back a year)	229	2882	**-0.13**
146	Summer vacation	78	711	**-0.02**
145	Open vs. traditional learning spaces	315	333	**0.01**

visible learning plus

Rank	Influence	Studies	Effects	Effect sizes
150	Mobility	181	540	**-0.34**
148	Retention (holding students back a year)	229	2882	**-0.13**
146	Summer vacation	78	711	**-0.02**
145	Open vs. traditional learning spaces	315	333	**0.01**

visible learning^plus

Rank	Influence	Studies	Effects	Effect sizes
137	Changing the school calendar	47	644	**0.09**
136	Teacher subject matter knowledge	92	424	**0.09**
133	Gender	3,168	6,293	**0.12**
131	Ability grouping (in ability classes)	500	1,369	**0.12**

visible learning[plus]
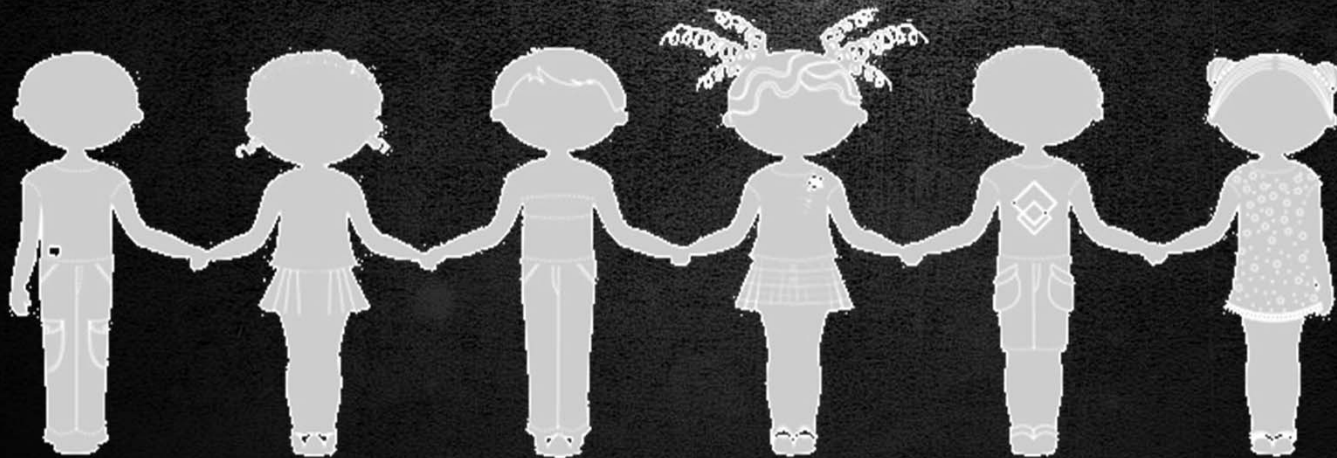
Rank	Influence	Studies	Effects	Effect sizes
125	Matching learning styles	244	1,234	**0.17**
120	Within-class grouping	144	209	**0.18**
113	Class size	113	802	**0.21**

visible learning[plus]

Rank	Influence	Studies	Effects	Effect sizes
109	Individualised instruction	638	1,185	**0.22**
106	Summer school	105	600	**0.23**
98	Teaching test-taking/coaching	275	372	**0.27**
94	Homework	161	295	**0.29**
91	Inquiry-based teaching	205	420	**0.31**
84	Decreasing disruptive behaviour	88	841	**0.34**

Primary 0.01
Secondary 0.59

visible learning^plus

Rank	Influence	Studies	Effects	Effect sizes
73	Principals/school leaders	521	1,409	**.39**

Moderating effects

instructional

transformational

visible learning^{plus}

Transformational leadership

- Inspirational motivation
- Individualised support
- Sets direction
- Vision, group goals, high-performance expectations
- Instructional support
- Monitoring school activity
- Buffering staff from external demands
- Fair and equitable staffing
- Easily accessible
- High degree of autonomy for the school

Instructional leadership

- Classroom observations
- Interpreting test scores with teachers
- Focusing on instructional issues
- Ensuring a coordinated instructional programme
- Highly visible
- Communicating high academic standards
- Ensuring class atmospheres are conducive to learning

visible learning plus

And the difference between them
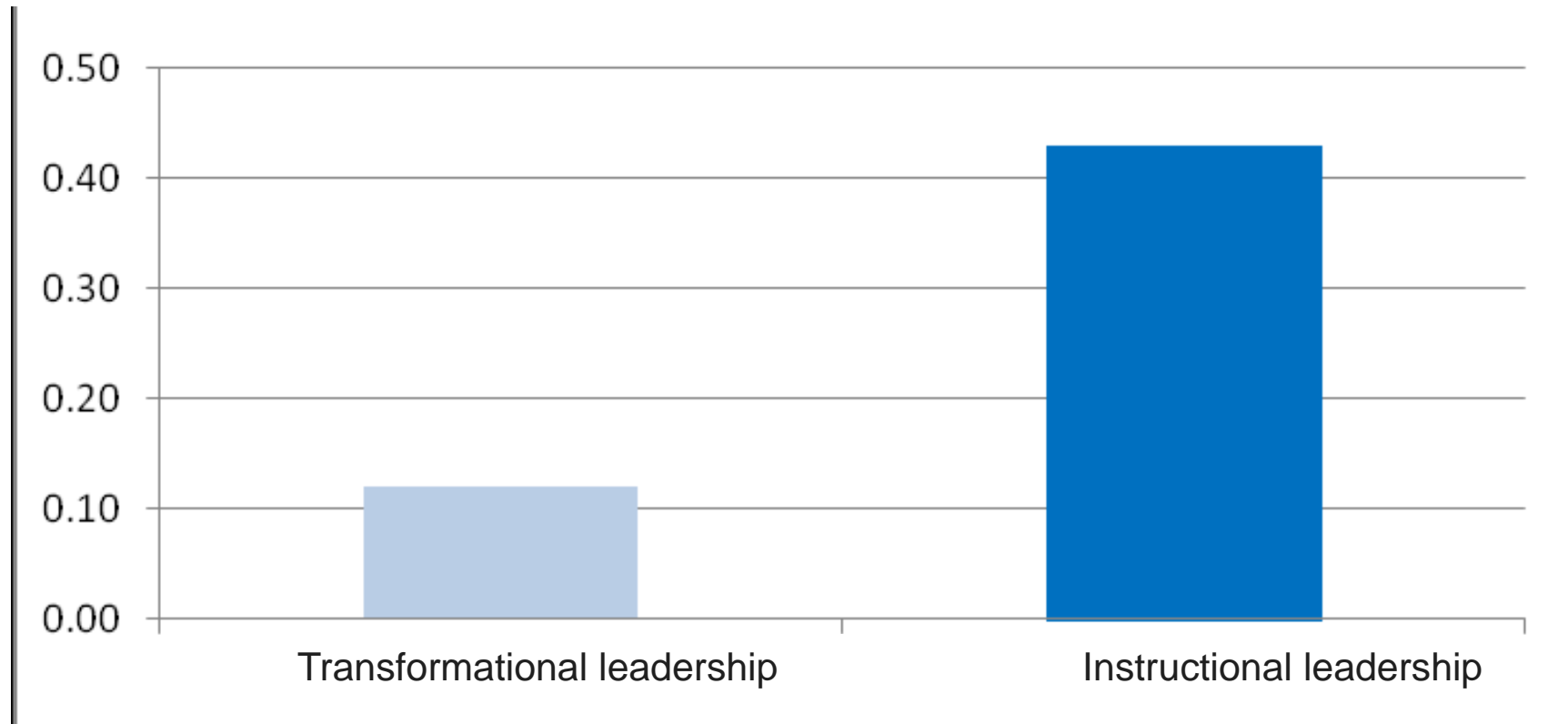
Rank	Influence	Studies	Effects	Effect sizes
47	Professional development	622	2,062	**0.51**
42	Classroom management	100	5	**0.52**

visible learning[plus]

Effective professional development

- Over a long period of time (three to five years)

- Involves external experts

- Teachers are deeply engaged

- It challenges teachers' existing beliefs

- Teachers talk to each other about teaching

- School leadership supports teachers' opportunities to learn and provides opportunities within the school structure for this to happen

Timperley, Wilson, Barrar and Fung (2007), *Teacher Professional Learning and Development: Best Evidence Synthesis Iteration,* MoE

visible learning^{plus}

Rank	Influence	Studies	Effects	Effect sizes
37	Student-centered teaching	19	19	**0.54**
32	Worked examples	62	151	**0.57**

Khan Academy

visible learning plus

Rank	Influence	Studies	Effects	Effect sizes
22	Study skills	1,278	3,450	**0.63**
14	Metacognitive strategies	63	143	**0.69**

visible learning[plus]

Rank	Influence	Studies	Effects	Effect sizes
12	Teacher-student relationships	229	1,450	**0.72**

visible learning plus

Rank	Influence	Studies	Effects	Effect sizes
10	Feedback	1,310	2,086	**0.75**
9	Teacher clarity	Not available	Not available	**0.75**
7	Classroom discussion	42	42	**0.82**

CLARITY

visible learning plus

Rank	Influence	Studies	Effects	Effect sizes
6	Micro-teaching	402	439	**0.81**
5	Providing formative evaluation	30	78	**0.90**
1	Student expectations/assessment-capable learners	209	305	**1.44**

Identifying what matters

Percentage of achievement variance

visible learning[plus]

The Visible Learning Story

visible learning plus

The mindframes for change

I am an evaluator

visible learning[plus]

I talk about learning not about teaching

I see assessment as feedback to me

I enjoy the challenge
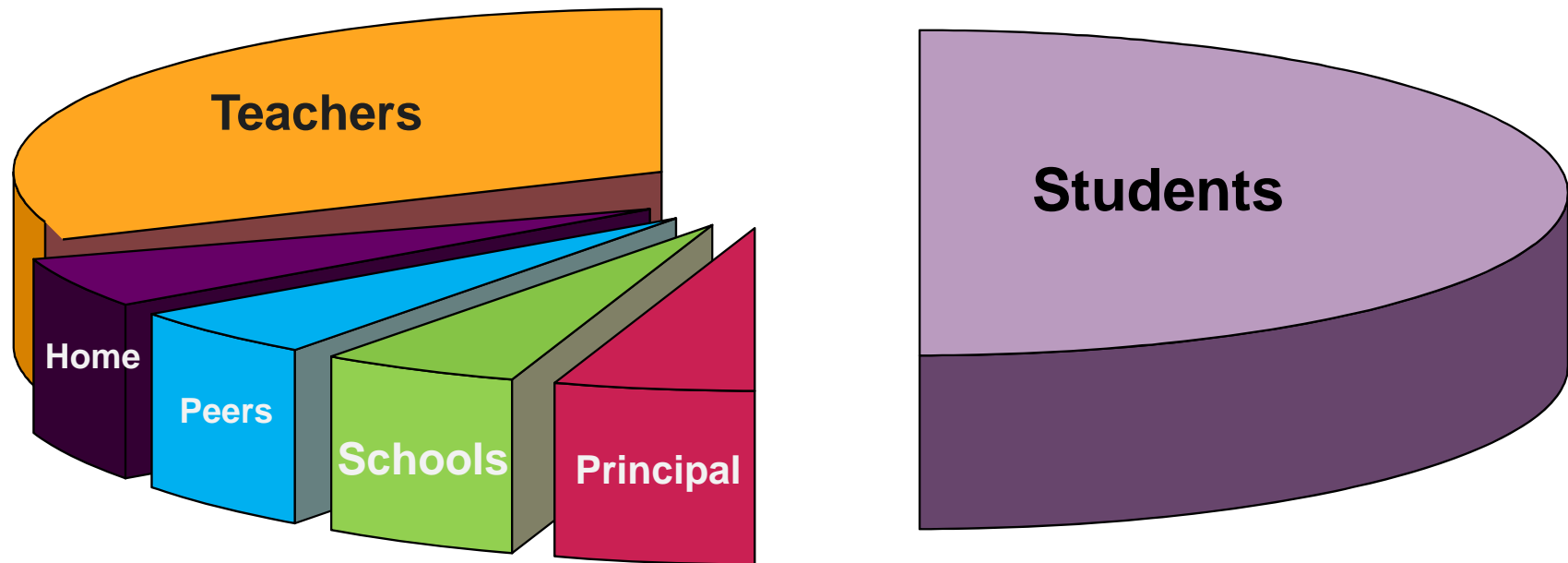
I develop positive relationships…

I use the language of learning

I see learning as hard work

Visible Teaching – Visible Learning

When teachers **SEE** learning through the eyes of the student

and when students **SEE** themselves as their own teachers.

visible learning^plus

The five strands of Visible Learning:

- The visible learner
- Know thy impact
- Inspired and passionate teaching
- Effective feedback
- Visible learning school

visible learning^{plus}

Thank you

visible learning[plus]