

Doug Fisher
www.fisherandfrey.com



Visible Learning for Literacy

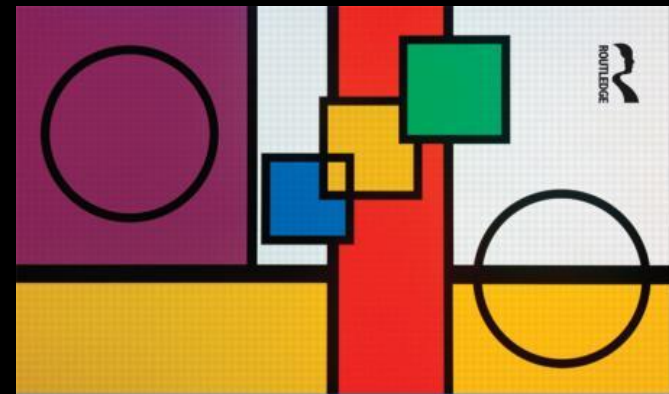
Every student deserves
a *great* teacher, not by
chance, but by **design**.

VISIBLE LEARNING

A SYNTHESIS OF OVER 800 META-ANALYSES
RELATING TO ACHIEVEMENT

"Reveals teaching's Holy Grail"

The Times Educational Supplement

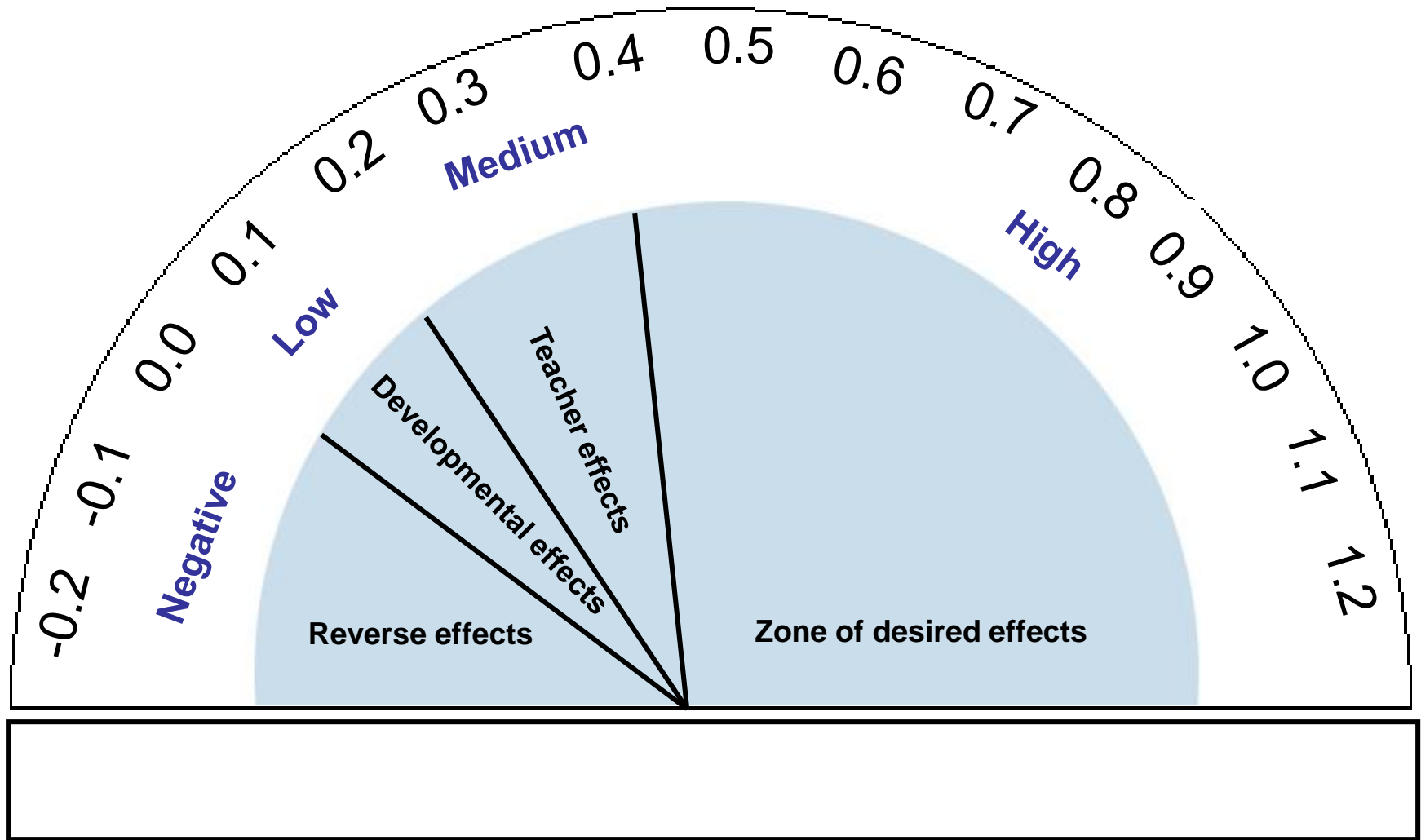


VISIBLE LEARNING FOR TEACHERS

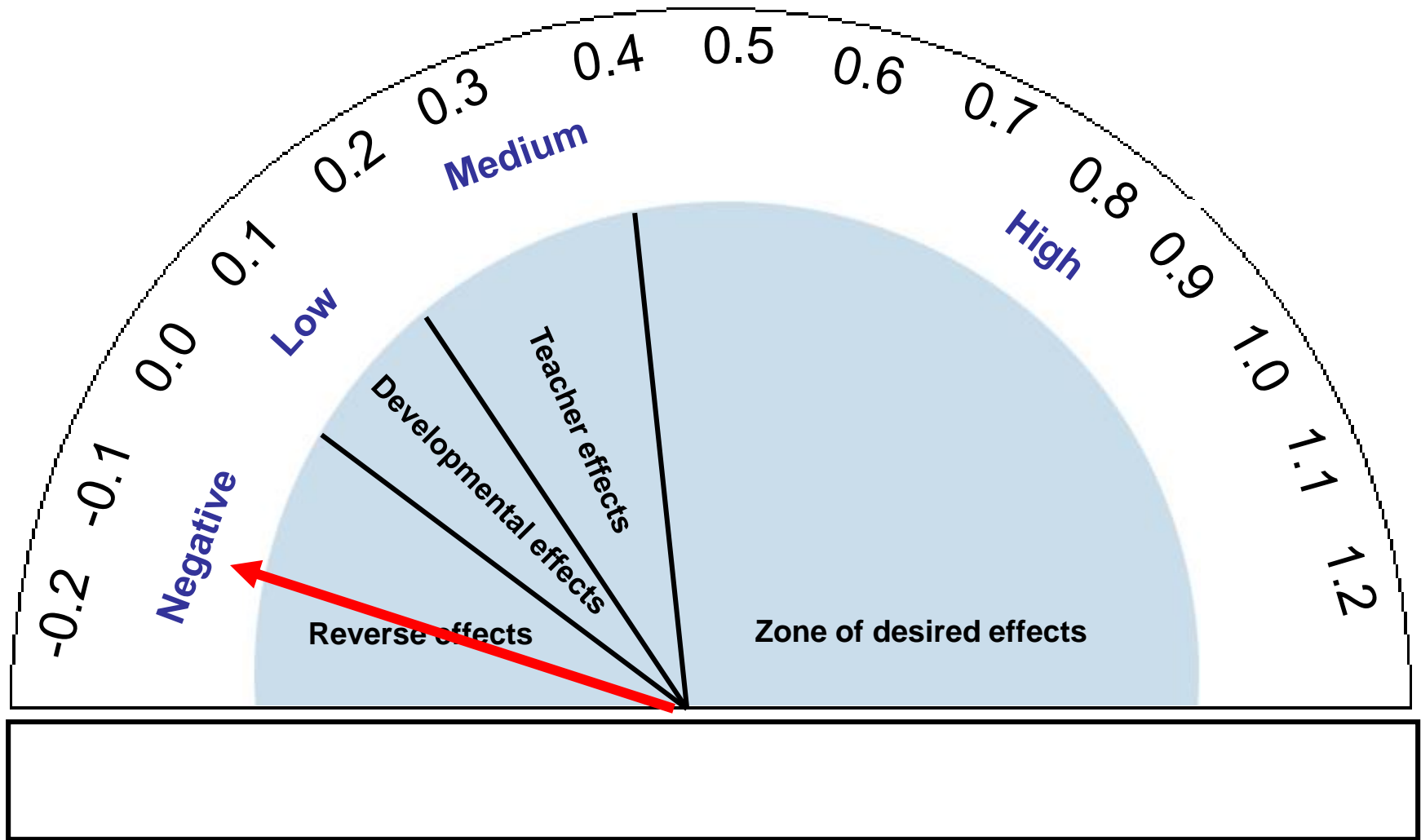
MAXIMIZING IMPACT ON LEARNING

JOHN HATTIE

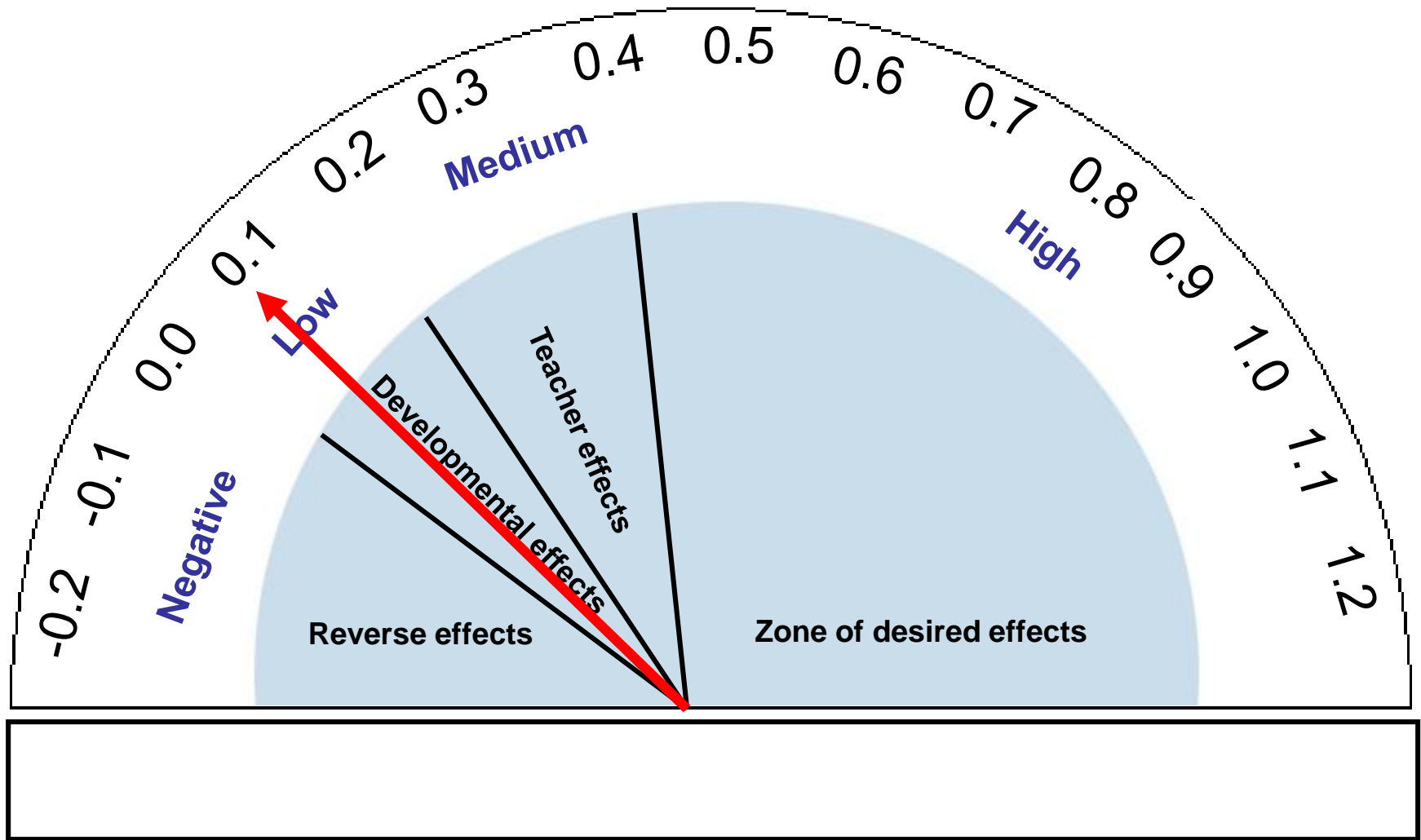




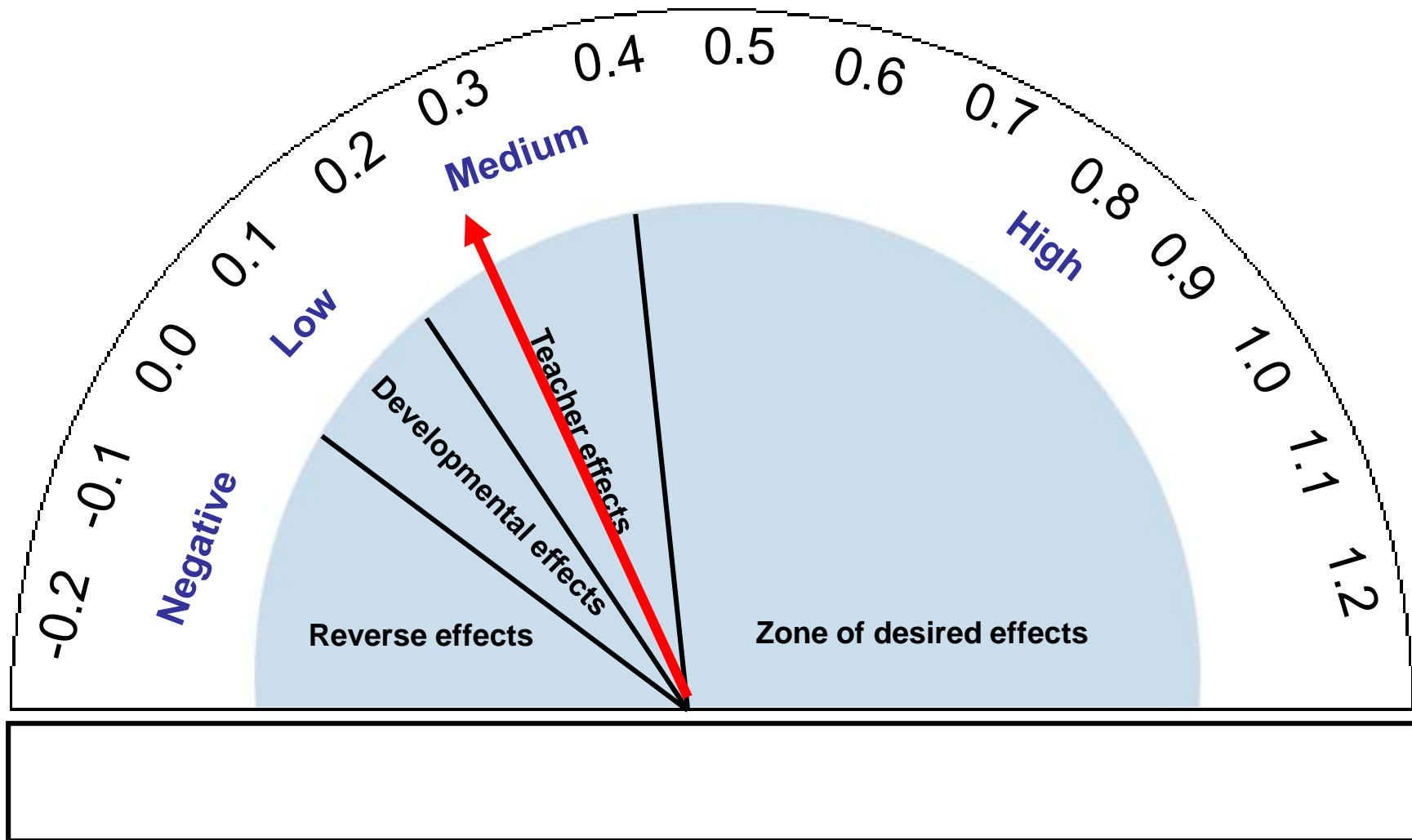
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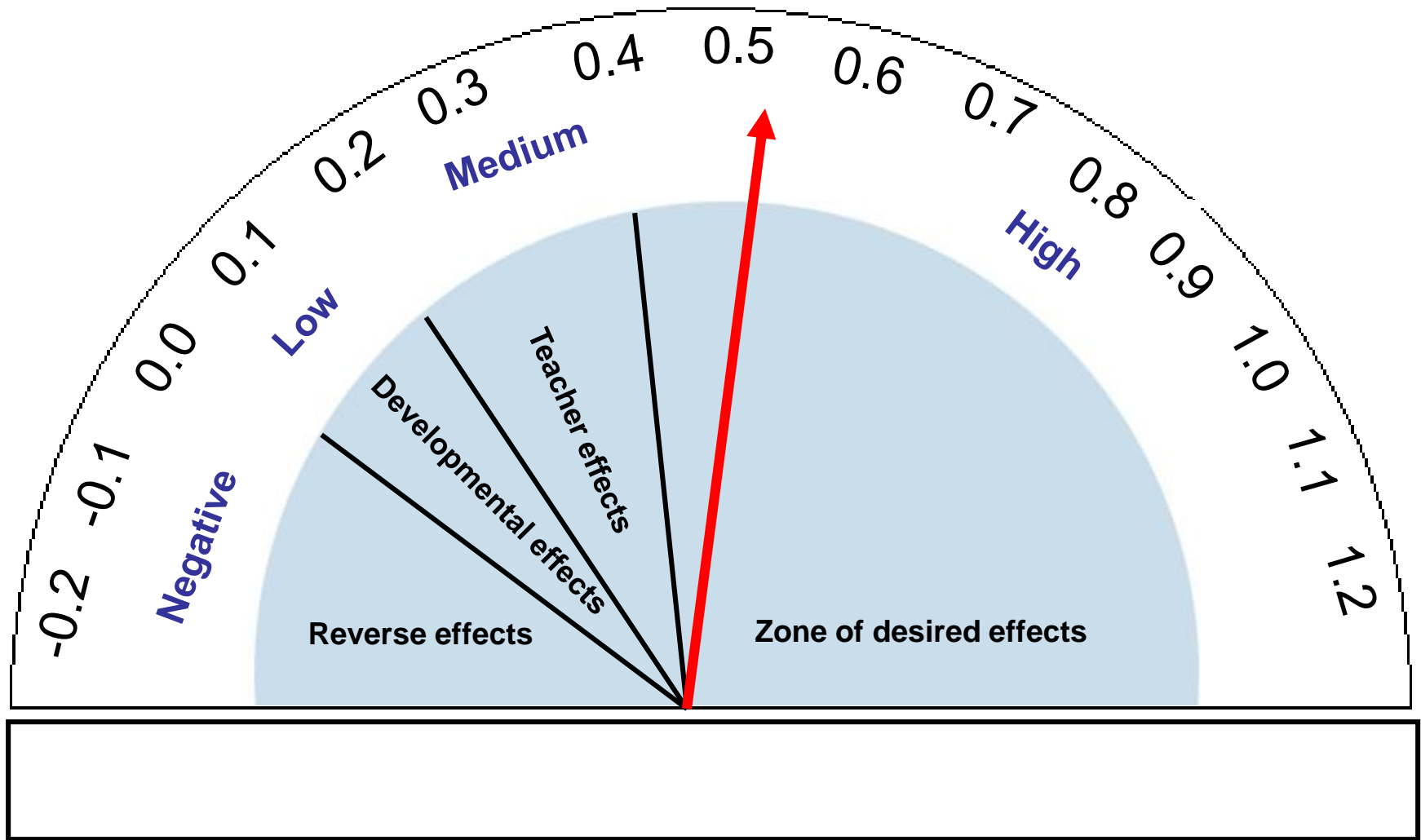
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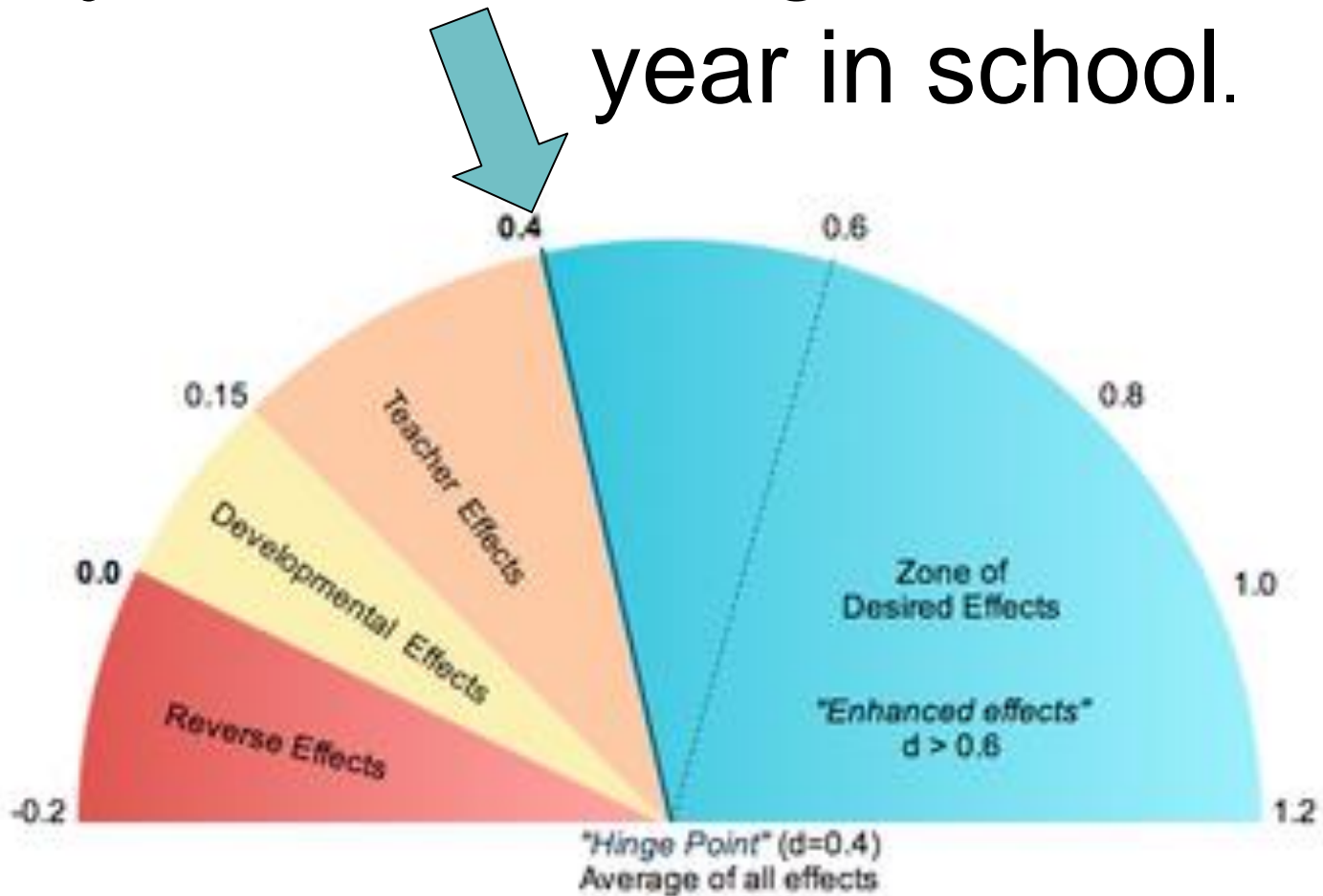


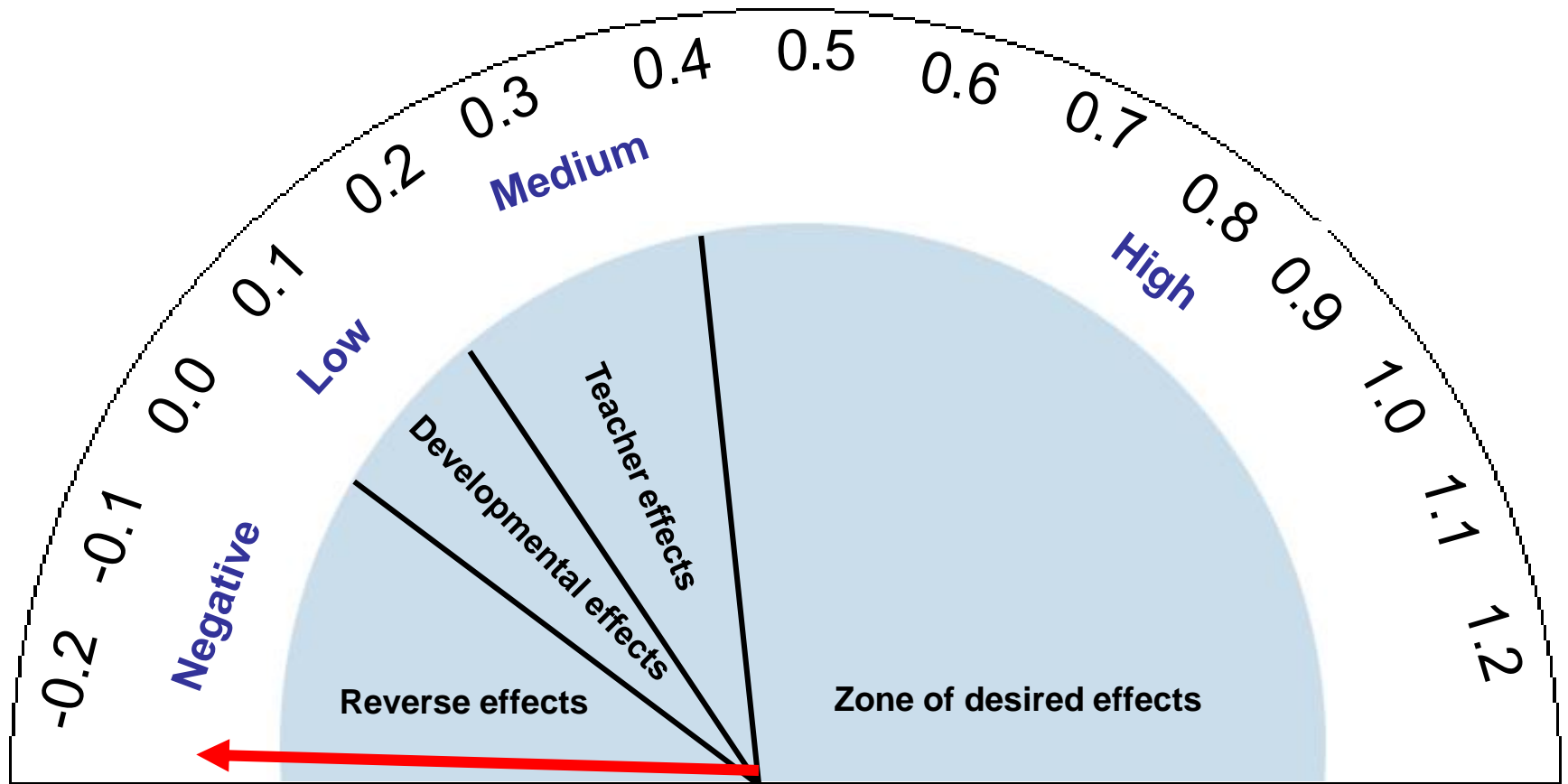
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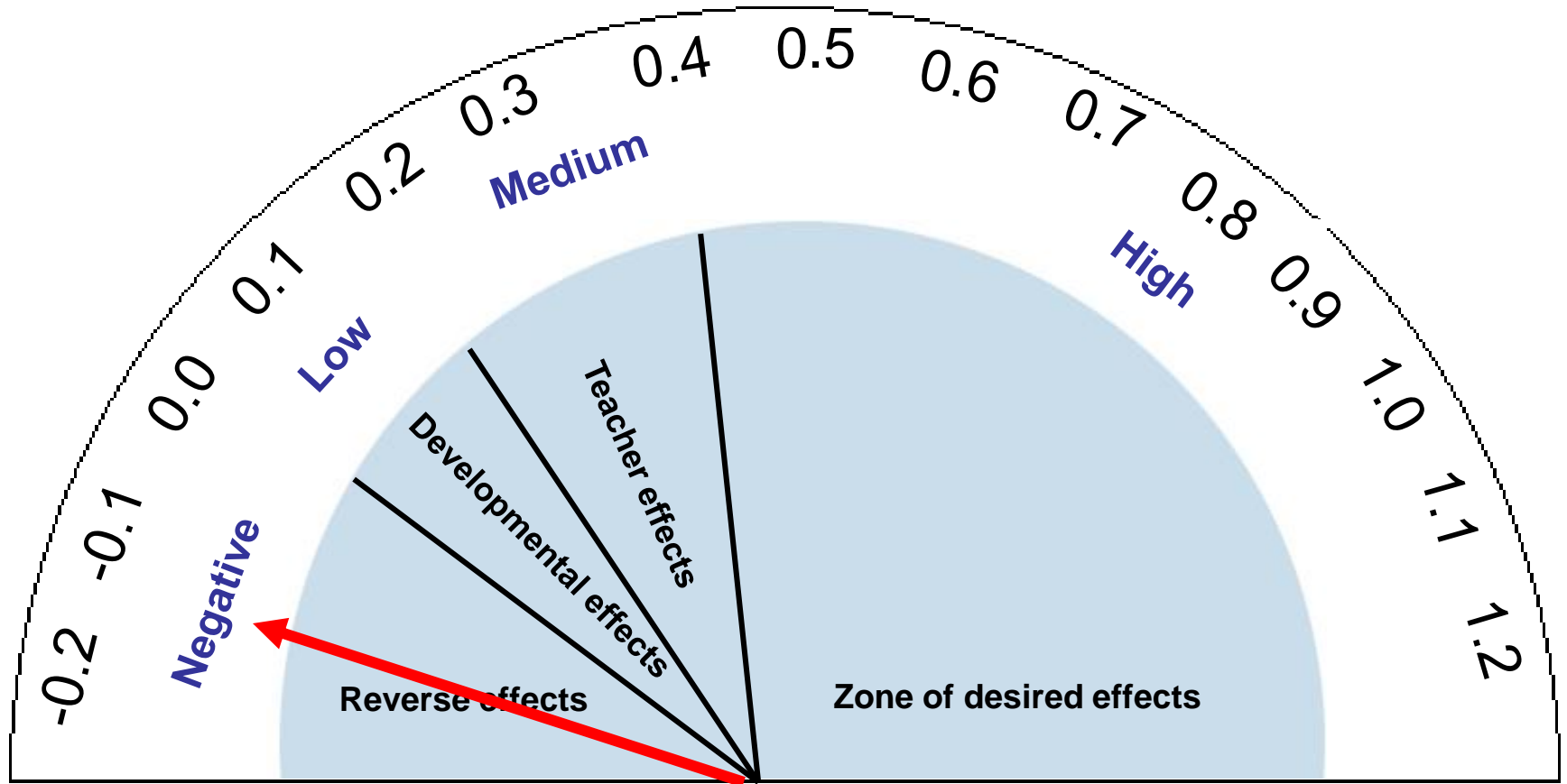
This is the hinge point –
a year's worth of growth for a
year in school.





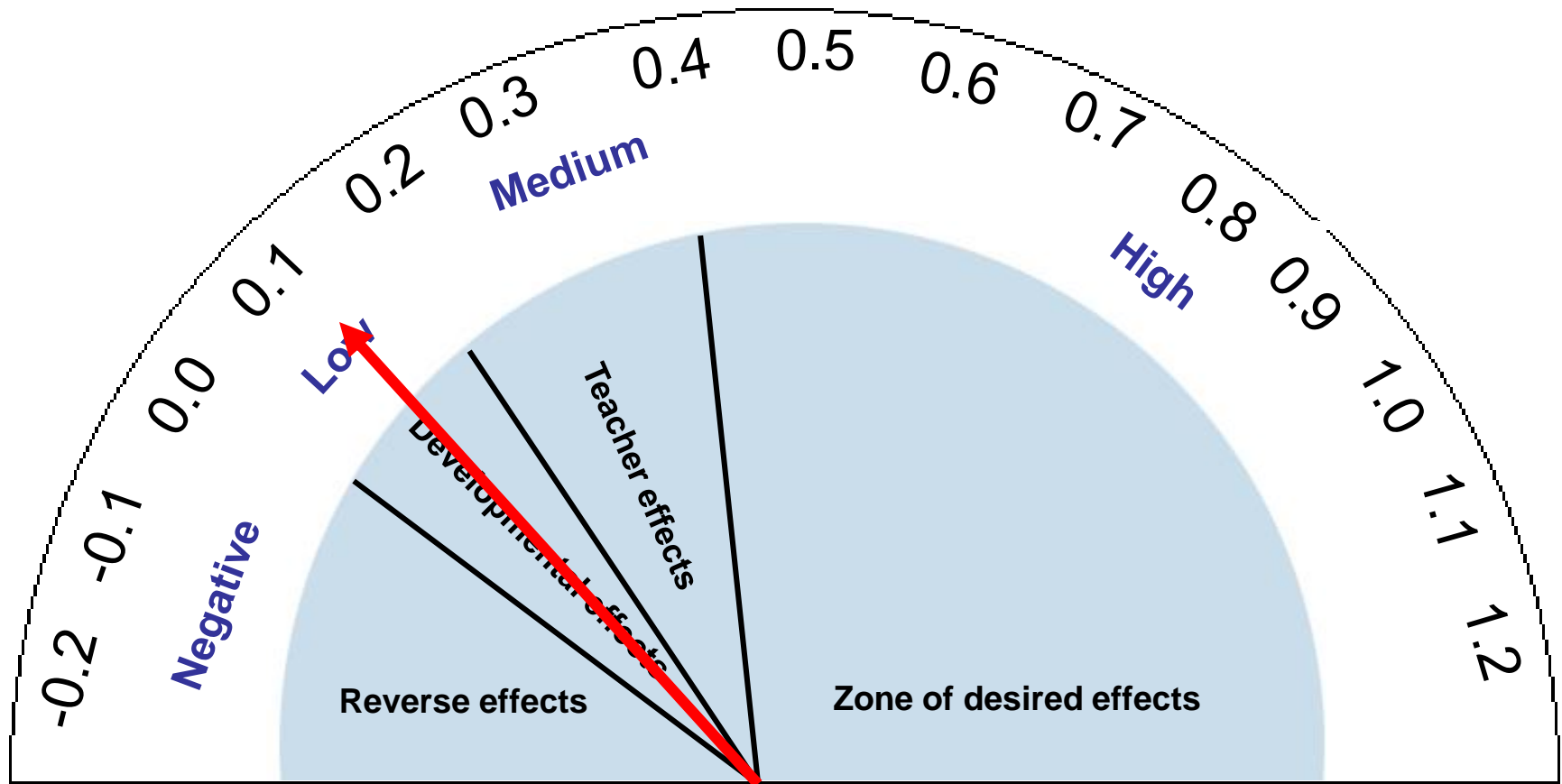
Mobility: $d = -.34$

Hattie, J. (2009). *Visible learning: A synthesis of over 800 meta-analyses related to achievement*. New York: Routledge.



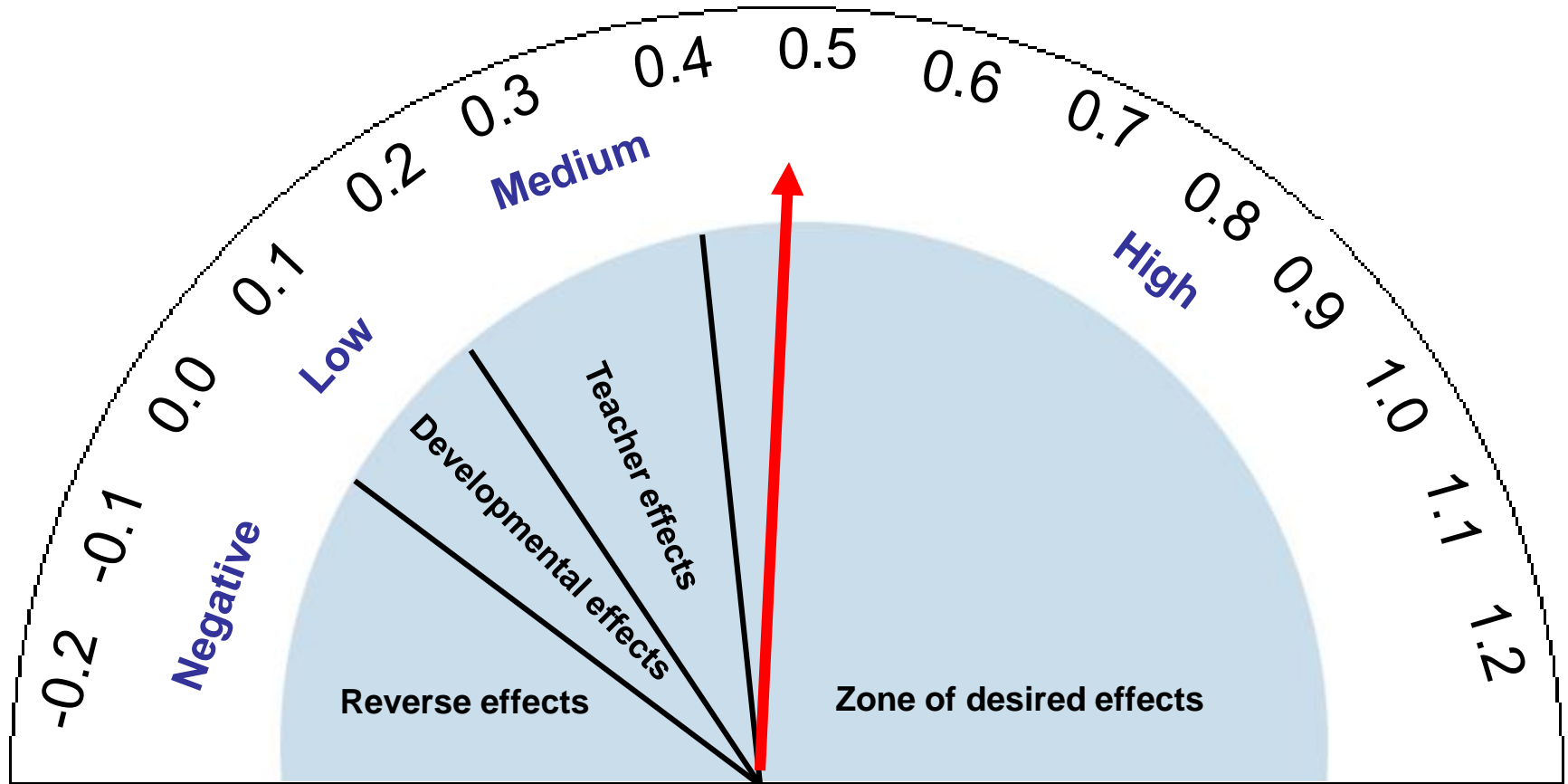
Retention: $d = -0.13$

Hattie, J. (2009). *Visible learning: A synthesis of over 800 meta-analyses related to achievement*. New York: Routledge.



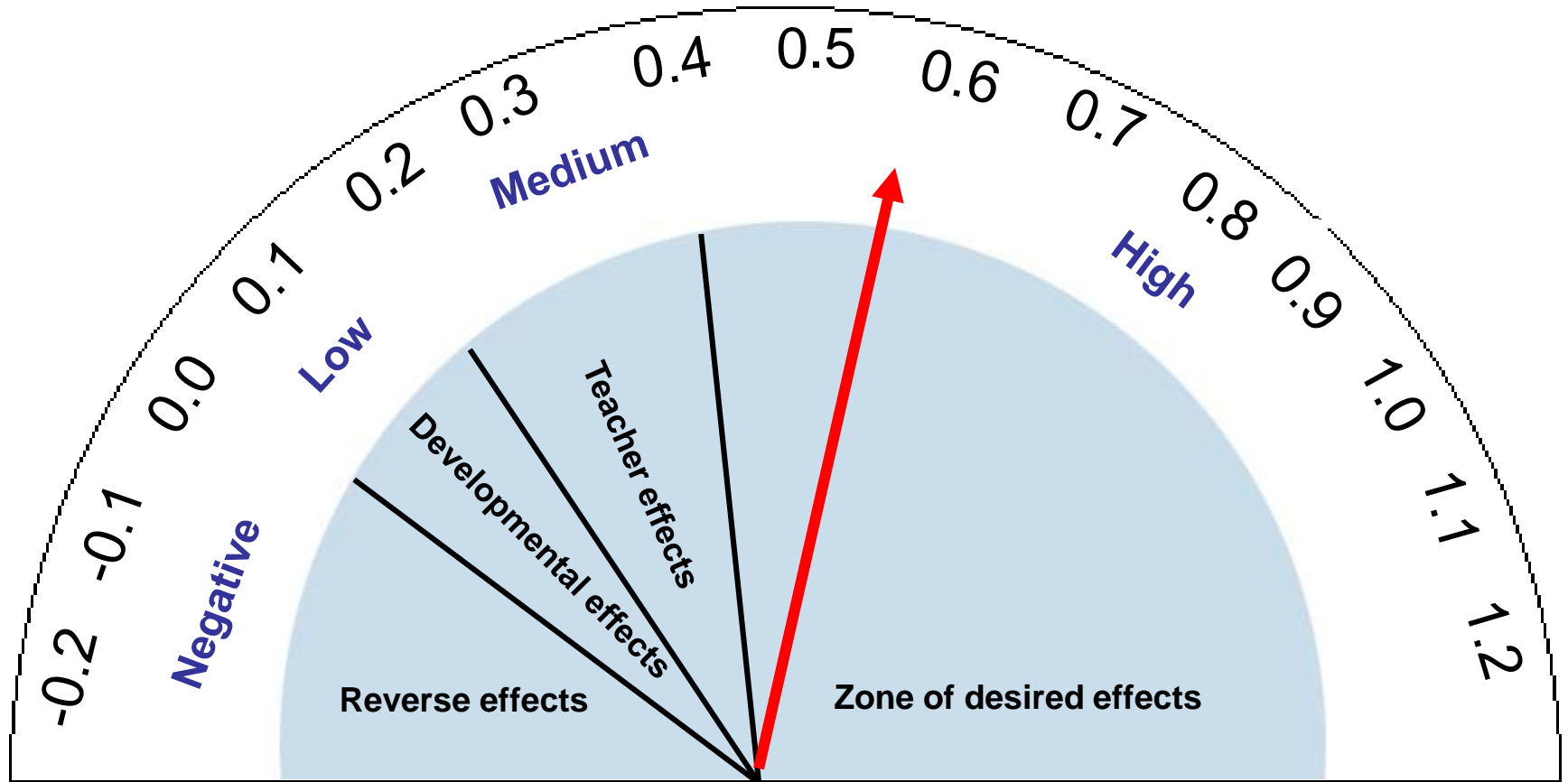
Ability Grouping/Tracking: $d = 0.12$

Hattie, J. (2009). *Visible learning: A synthesis of over 800 meta-analyses related to achievement*. New York: Routledge.



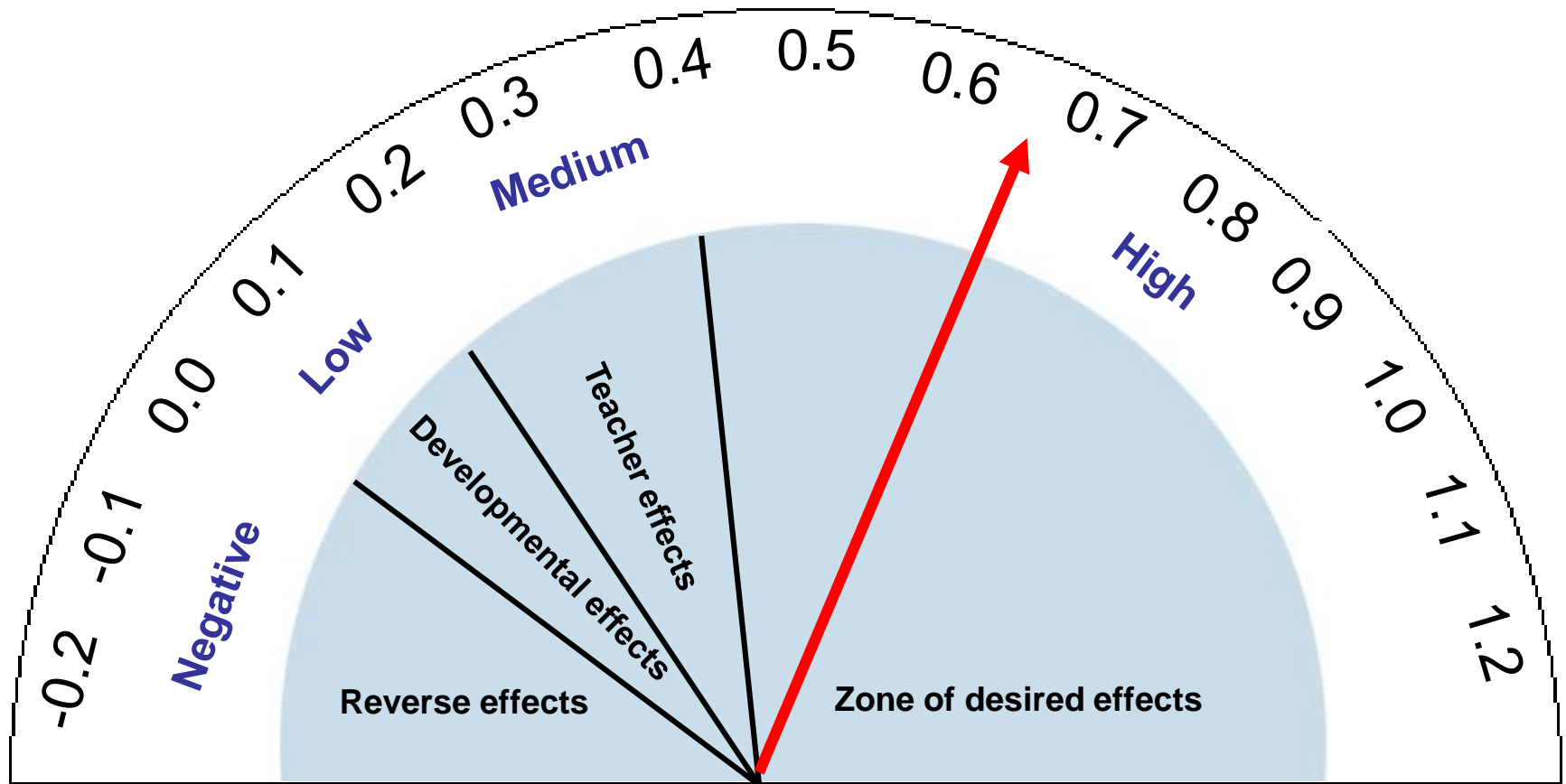
Small group learning: $d = 0.49$

Hattie, J. (2009). *Visible learning: A synthesis of over 800 meta-analyses related to achievement*. New York: Routledge.



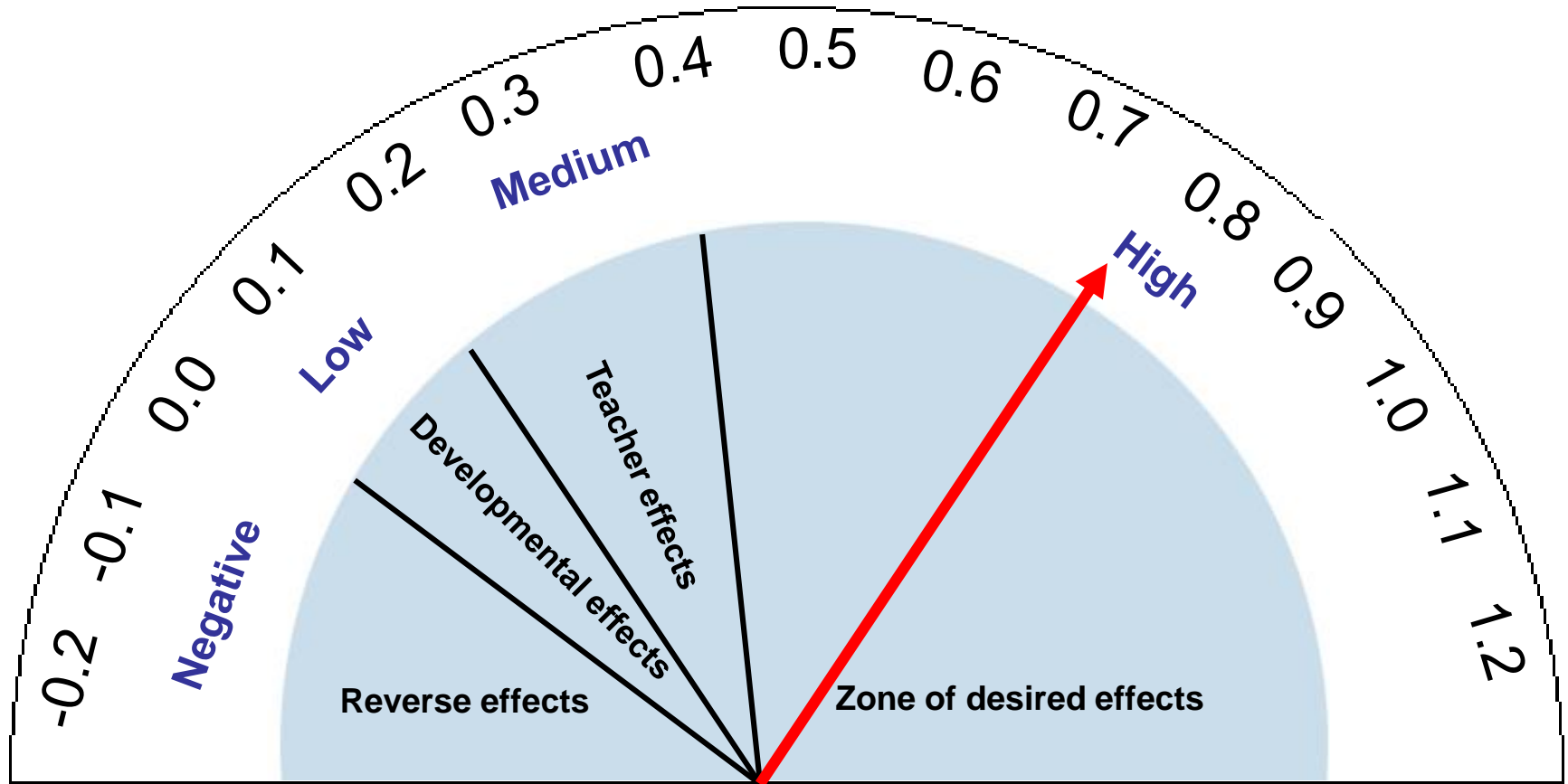
Study Skills: $d = 0.59$

Hattie, J. (2009). *Visible learning: A synthesis of over 800 meta-analyses related to achievement*. New York: Routledge.



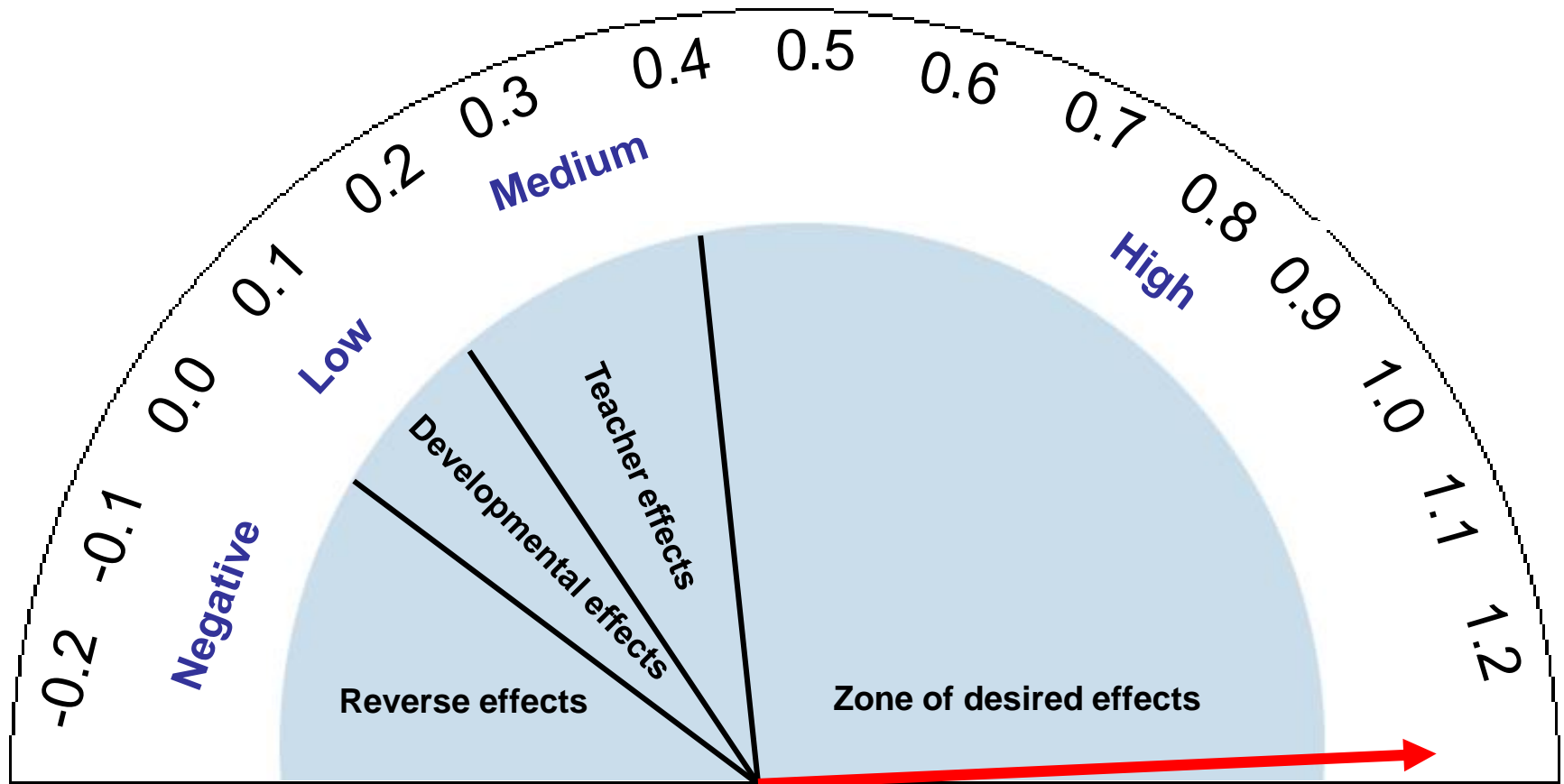
Repeated Reading: $d = 0.67$

Hattie, J. (2009). *Visible learning: A synthesis of over 800 meta-analyses related to achievement*. New York: Routledge.



Classroom Discussion: $d = 0.82$

Hattie, J. (2009). *Visible learning: A synthesis of over 800 meta-analyses related to achievement*. New York: Routledge.



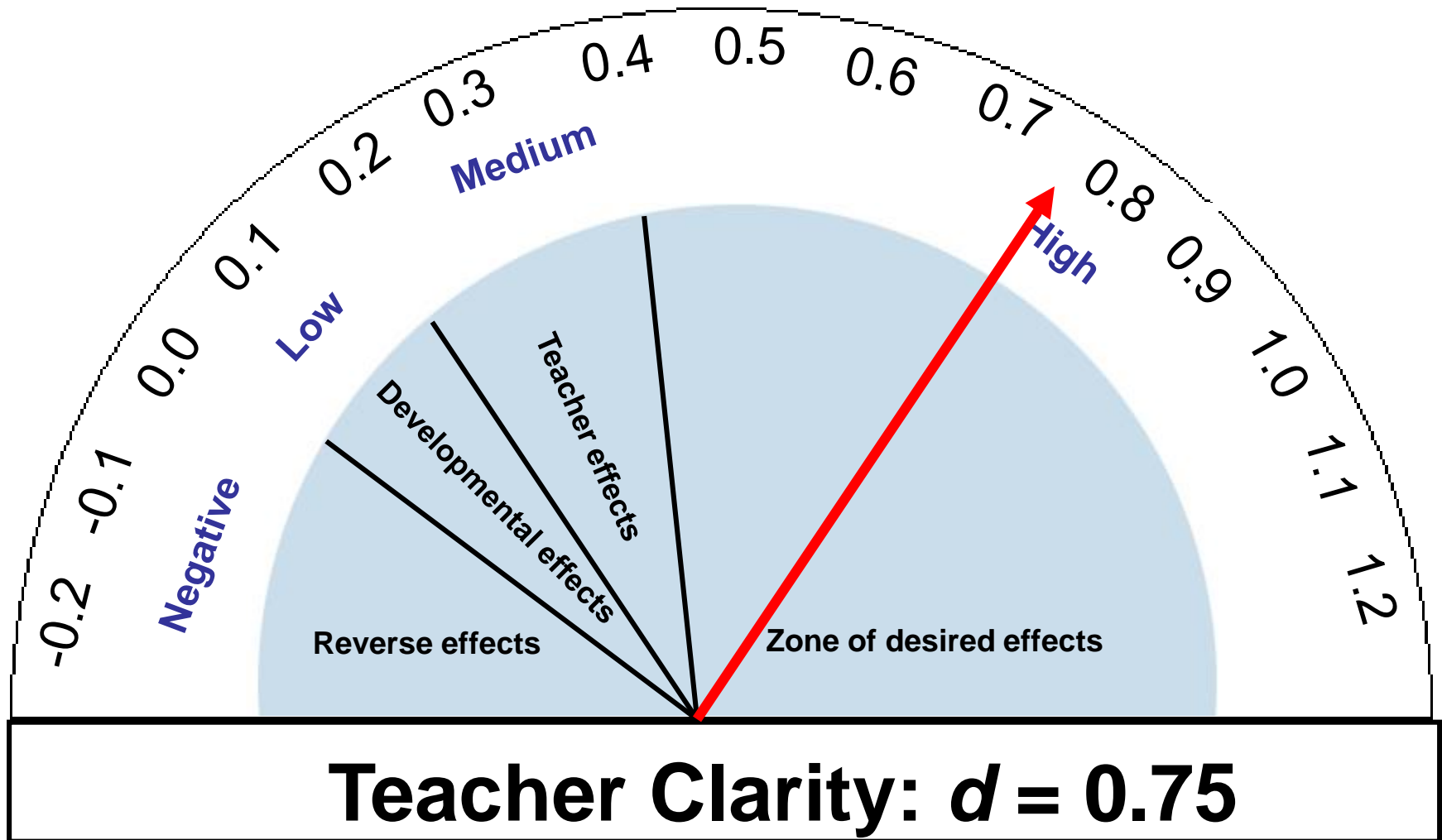
Collective Teacher Efficacy: $d = 1.57$

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- Teachers know what students need to learn
- Teachers communicate learning intentions to students

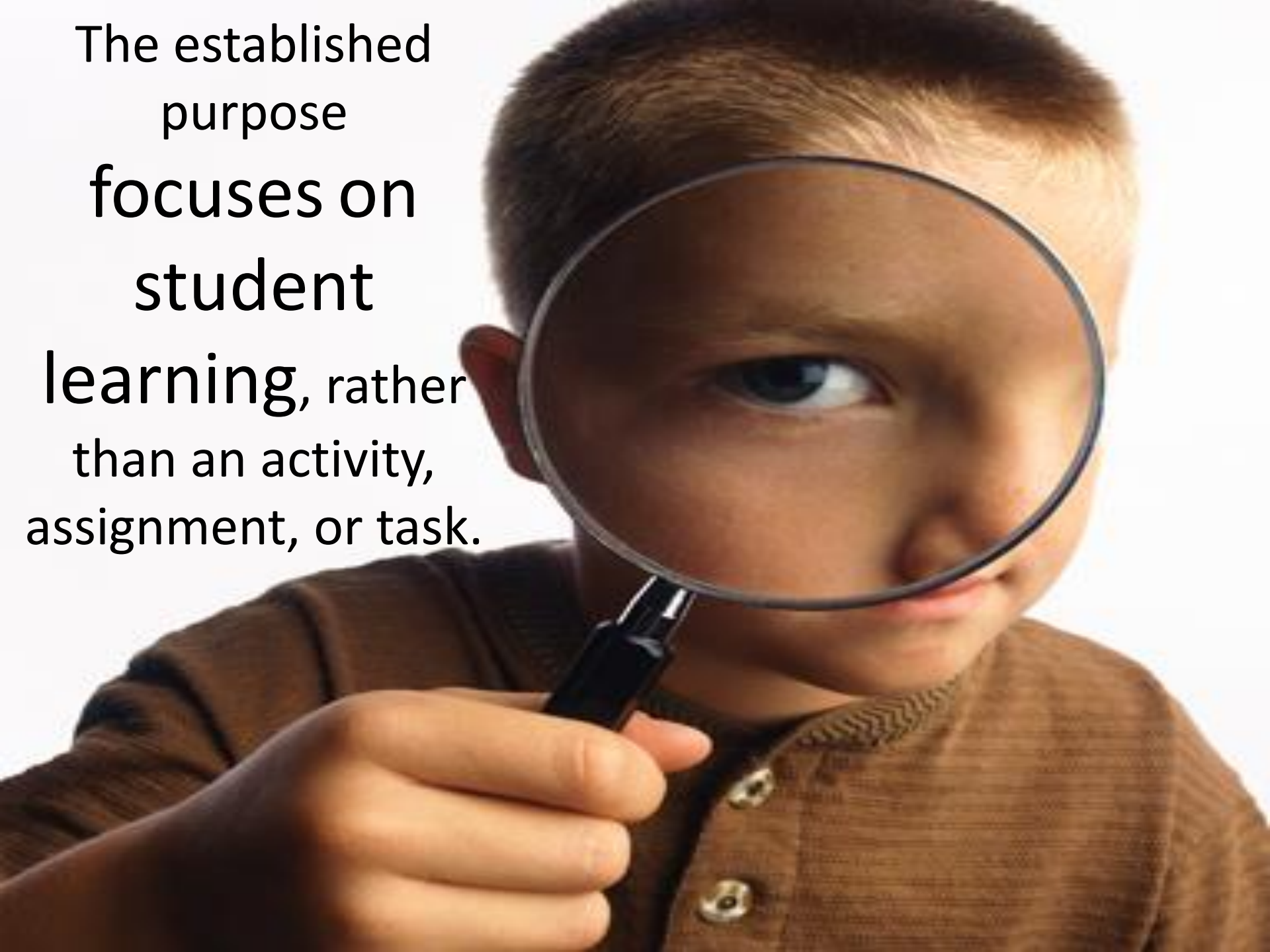


- Teachers and students understand success criteria



Hattie, J. (2009). *Visible learning: A synthesis of over 800 meta-analyses related to achievement*. New York: Routledge.

The established
purpose
focuses on
student
learning, rather
than an activity,
assignment, or task.





Specific

Measurable

Attainable

Relevant

Timed



WHY?



Three Questions



What am I learning today?

Why am I learning this?

How will I know that I have learned it?

- Teachers know what students need to learn
- Teachers communicate learning intentions to students



- Teachers and students understand success criteria

Sara explained the writing rubric, used reasoning to argue her status, and conveyed a set of experiences about writers at each level.



Exit Slips

1

I'm Just
learning
(I need more help)

2

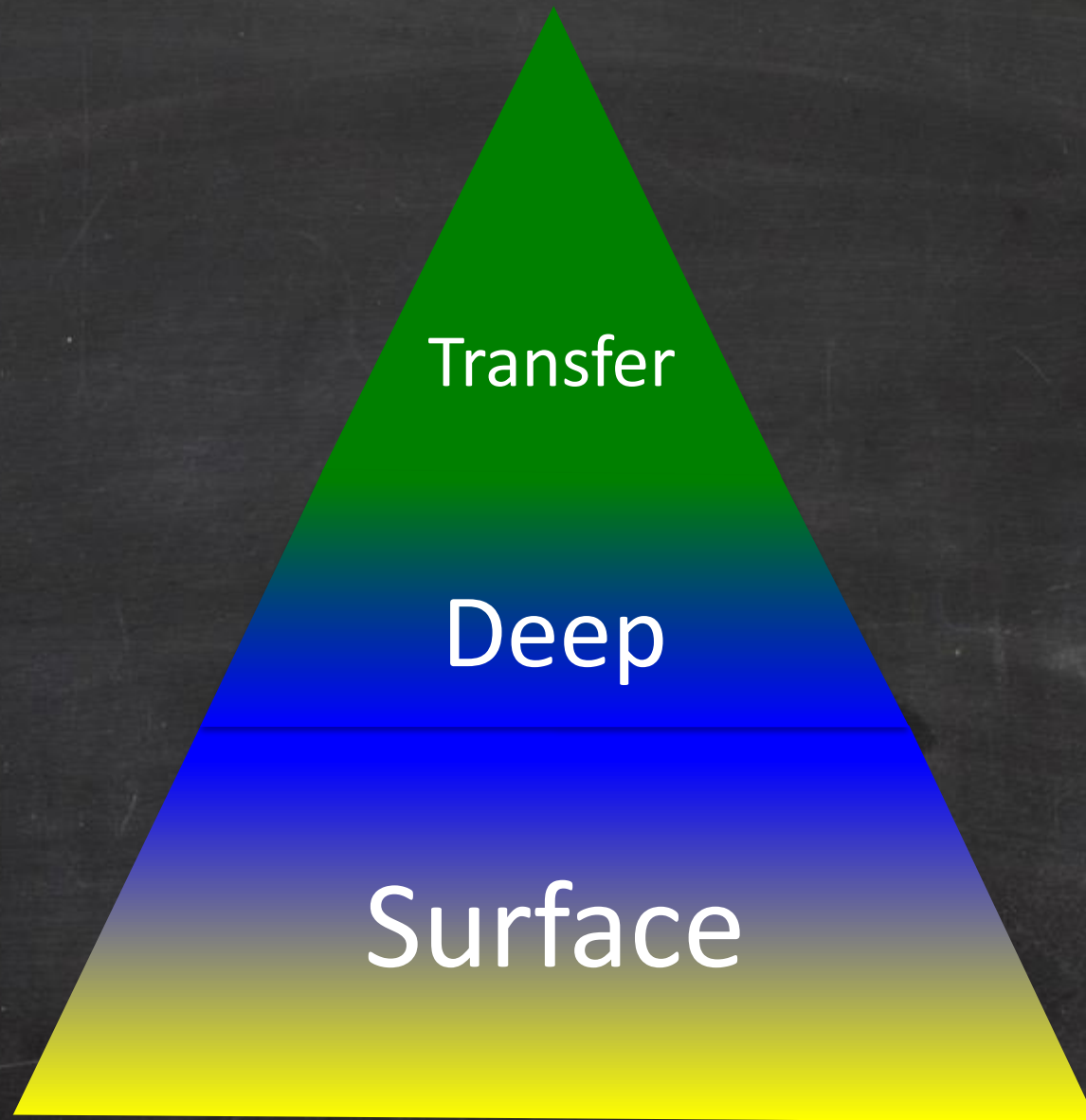
I'm Almost
there!
(I need more practice)

3

I OWN
it!
(I can work independently)

4

I'm a
Pro!
(I can teach others)





Surface



Skill and Concept
Development

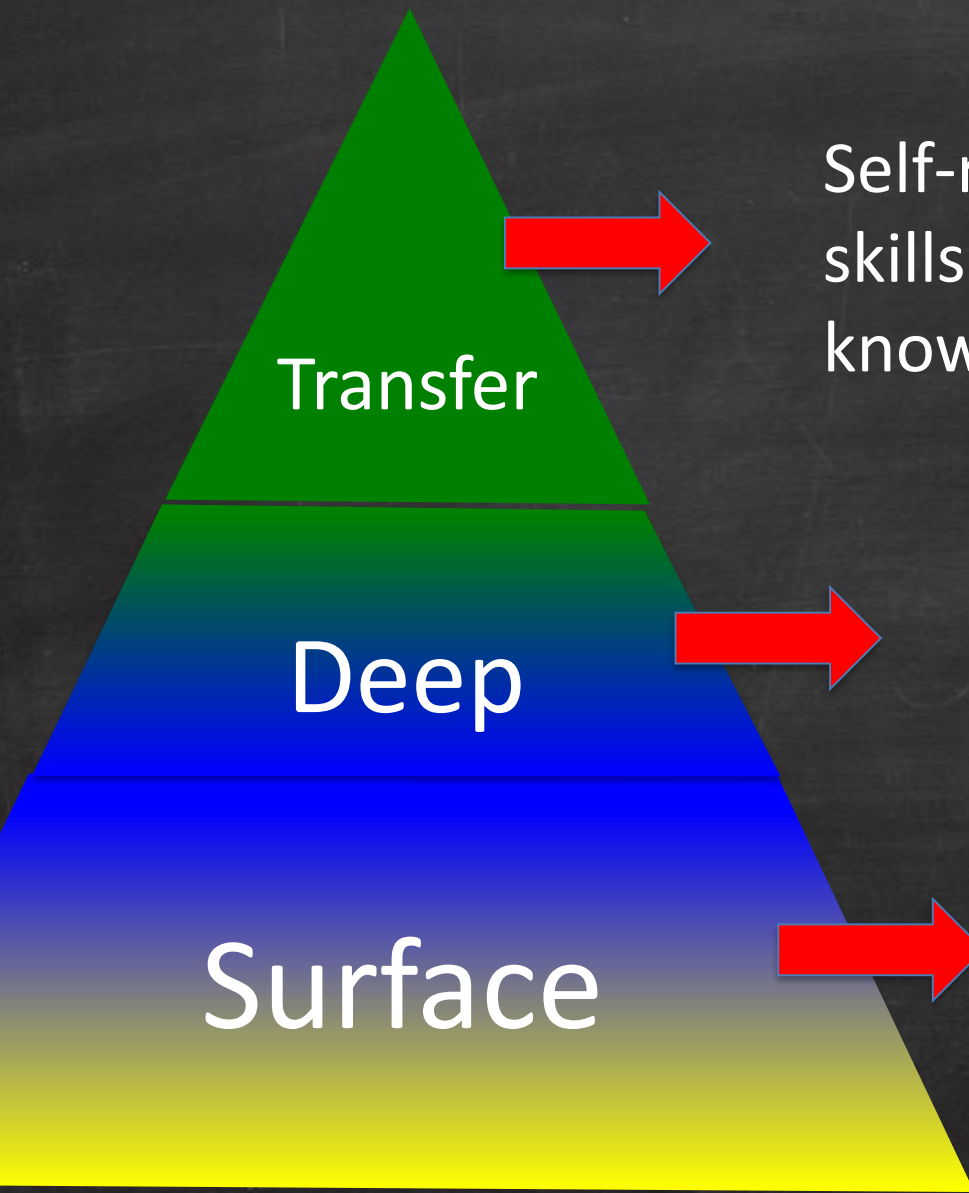


Deep

Connections, relationships
and schema to organize
skills and concepts

Surface

Skill and Concept
Development



Transfer

Self-regulation to continue learning skills and content, applying knowledge to novel situations

Deep

Connections, relationships and schema to organize skills and concepts

Surface

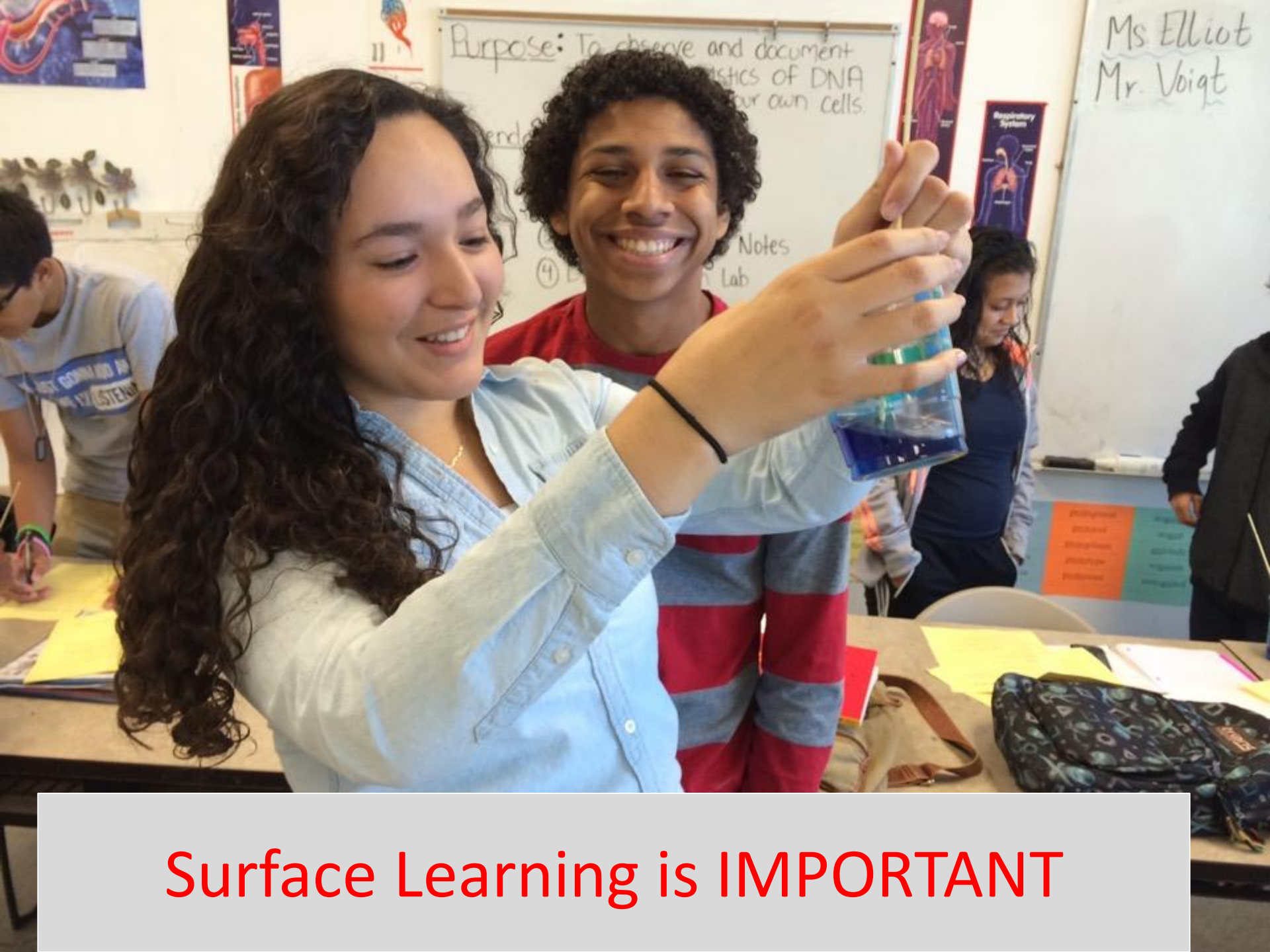
Skill and Concept Development

What

Works

When





Surface Learning is IMPORTANT

Ways to Facilitate Surface Learning

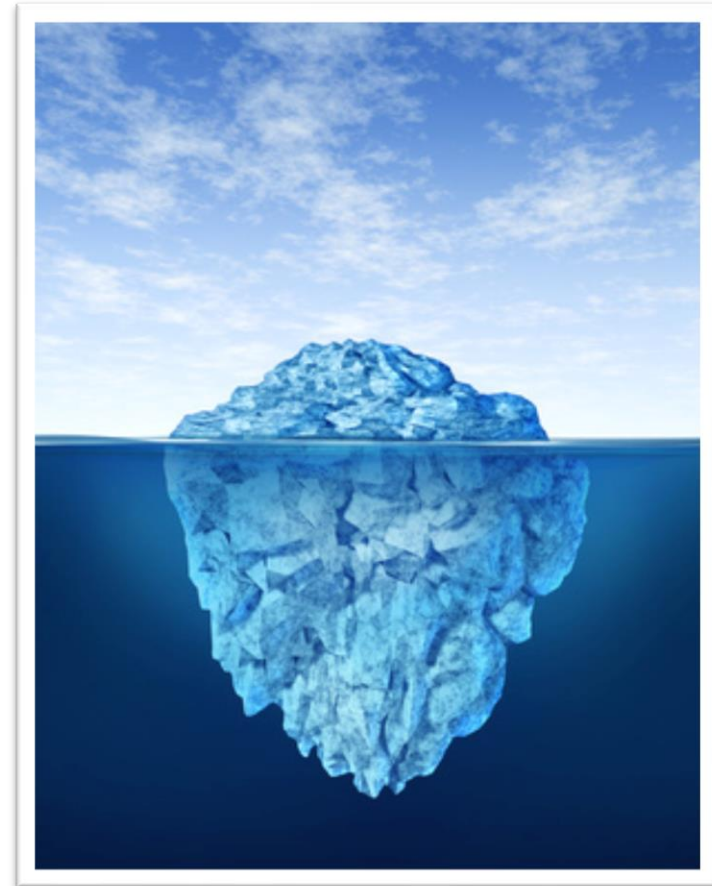
Leveraging prior knowledge ($d=0.65$)

Vocabulary techniques (sorts, word cards, etc.) ($d=0.67$)

Reading Comprehension Instruction ($d=0.60$)

Wide reading on the topic under study ($d=0.42$)

Summarizing ($d=0.63$)



Reading Volume Still Matters



STUDENT A

- 20 MINUTES PER DAY
- 1,800,000 WORDS PER YEAR
- SCORES IN THE 90TH PERCENTILE ON STANDARDIZED TESTS



STUDENT B



- 5 MINUTES PER DAY
- 282,000 WORDS PER YEAR
- SCORES IN THE 50TH PERCENTILE ON STANDARDIZED TESTS

STUDENT C

- 1 MINUTE PER DAY
- 8,000 WORDS PER YEAR
- SCORES IN THE 10TH PERCENTILE ON STANDARDIZED TESTS



Surface



Skill and Concept
Development





Deep Learning is Also Important

Ways to Facilitate **Deep Learning**

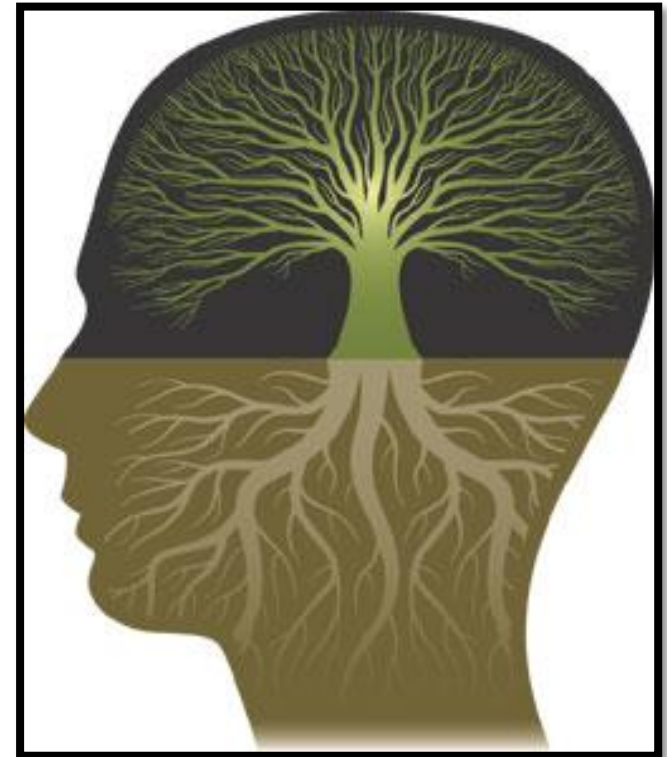
Concept mapping ($d=0.60$)

Class Discussion ($d=0.82$)

Questioning ($d=0.48$)

Metacognitive strategies ($d=0.69$)

Reciprocal teaching ($d=0.74$)



Deep learning approaches don't work any better at developing surface learning than surface learning strategies work to develop deep understanding.



Without more complex tasks, students will not deepen their learning.



Task complexity should align with
the phase of learning.



Difficulty v. Complexity

Difficulty

- A measure of **effort** required to complete a task.
- In assessment, a function of how many people can complete the task correctly.

Complexity

- A measure of the **thinking, action, or knowledge** that is needed to complete the task.
- In assessment, how many different ways can the task be accomplished.

Which of these means about the same as the word *gauge*?

- a. balance**
- b. measure**
- c. select**
- d. warn**

A car odometer registered 41,256.9 miles when a highway sign warned of a detour 1,200 feet ahead. What will the odometer read when the car reaches the detour? (5,280 feet = 1 mile)

- (a) 42,456.9
- (b) 41,279.9
- (c) 41,261.3
- (d) 41,259.2
- (e) 41,257.1

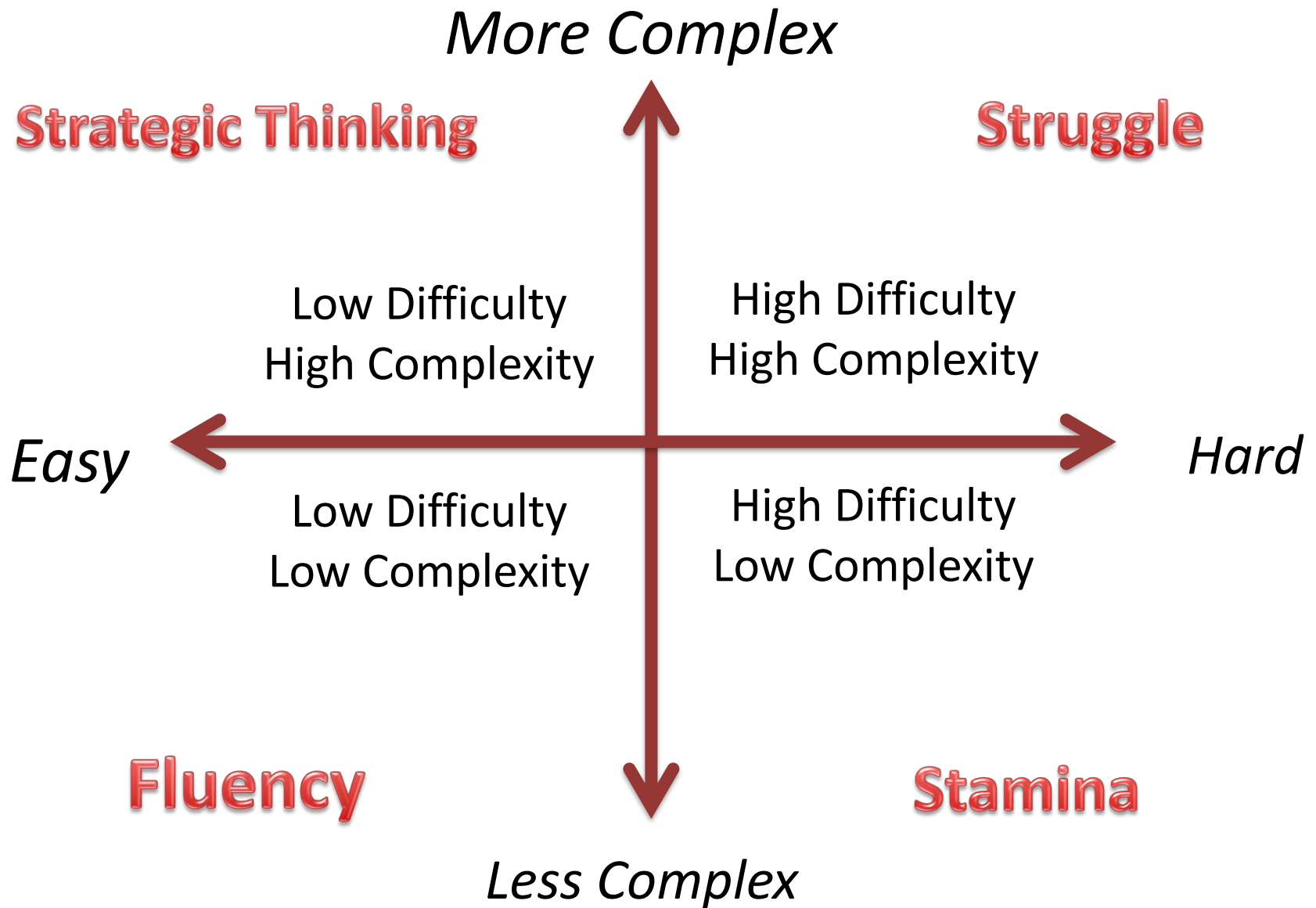
Did you use the calculator on this question?

☐ Yes

☐ No



Marc Umile is among a group of people fascinated with π , a number that has been computed to more than a trillion decimal places. He has recited π to 15,314 digits.



Deep learning approaches don't work any better at developing surface learning than surface learning strategies work to develop deep understanding.





Deep

Connections, relationships
and schema to organize
skills and concepts

Surface

Skill and Concept
Development

Transfer



“The ability to transfer is arguably the long-term aim of all education. You truly understand and excel when you can take what you have learned in one way or context and use it in another, on your own.”

McTighe & Wiggins, 2011

Ways to Facilitate Transfer

Reading across documents to conceptually organize ($d=0.85$)

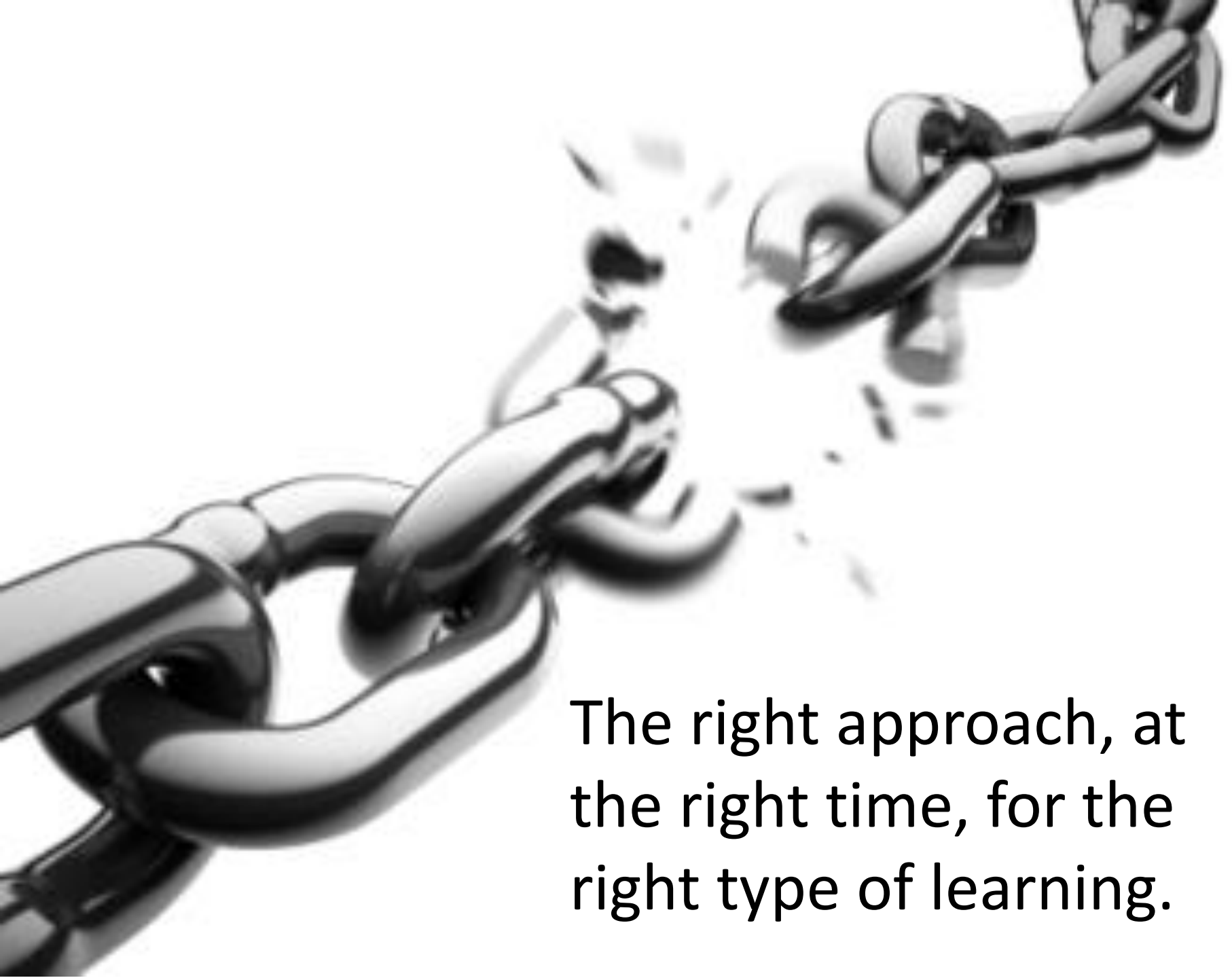
Formal discussion, including debates and Socratic seminars ($d=0.82$)

Problem-solving teaching ($d=0.61$)

Extended writing ($d=0.43$)

Peer tutoring ($d=.55$)





The right approach, at
the right time, for the
right type of learning.

Assessment Capable Learners

- Know their current level of understanding
- Know where they're going and are confident to take on the challenge
- Select tools to guide their learning
- Seek feedback and recognize that errors are opportunities to learn
- Monitor their progress and adjust their learning
- Recognize their learning and teach others

thank
you

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