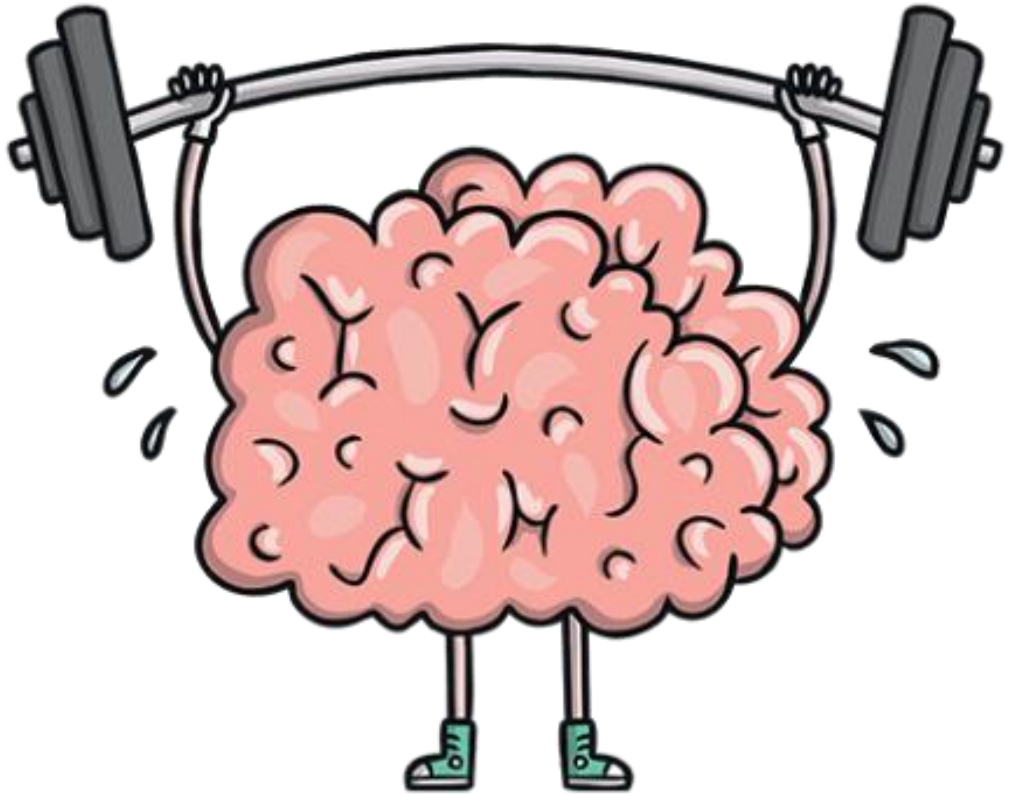
Using Evidence to Inform Practice

Peps

@pepsmccrea

Steplab

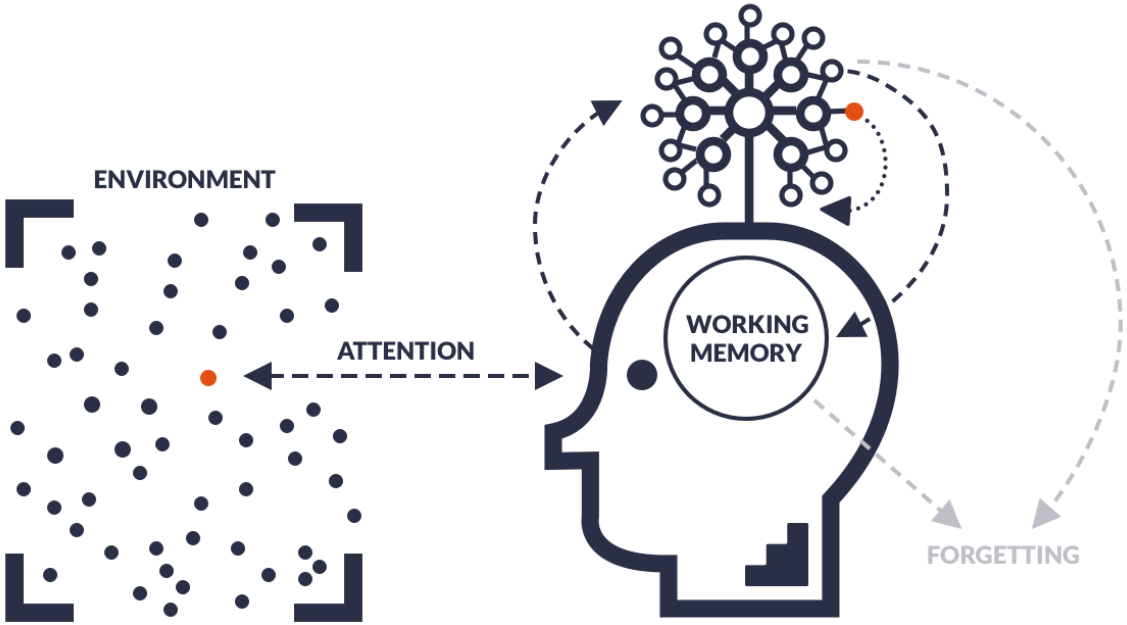


Evidence

What we attend to is what we learn about.

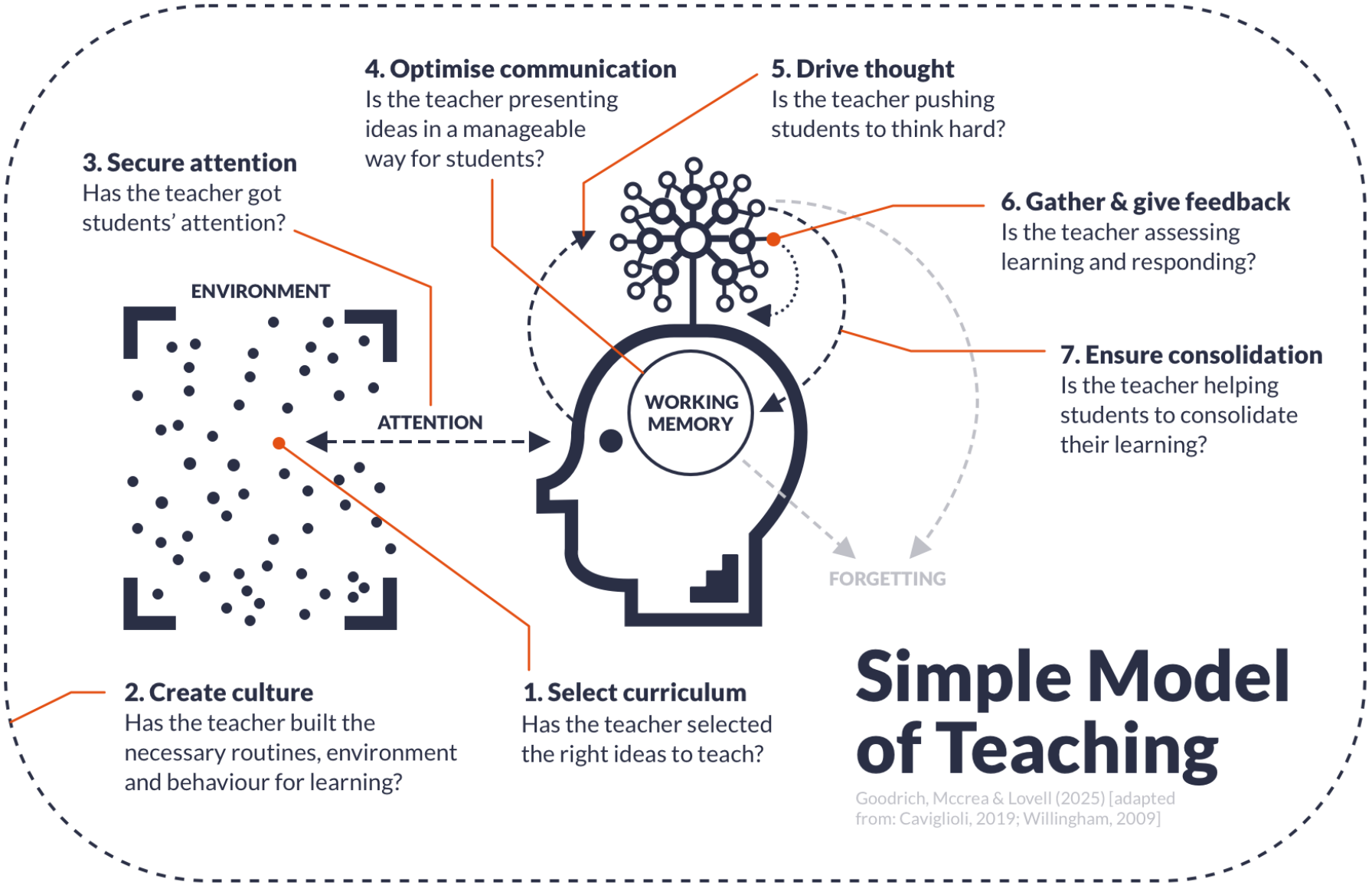
We can only attend to a few things at once.

How we learn is more similar than it is different.

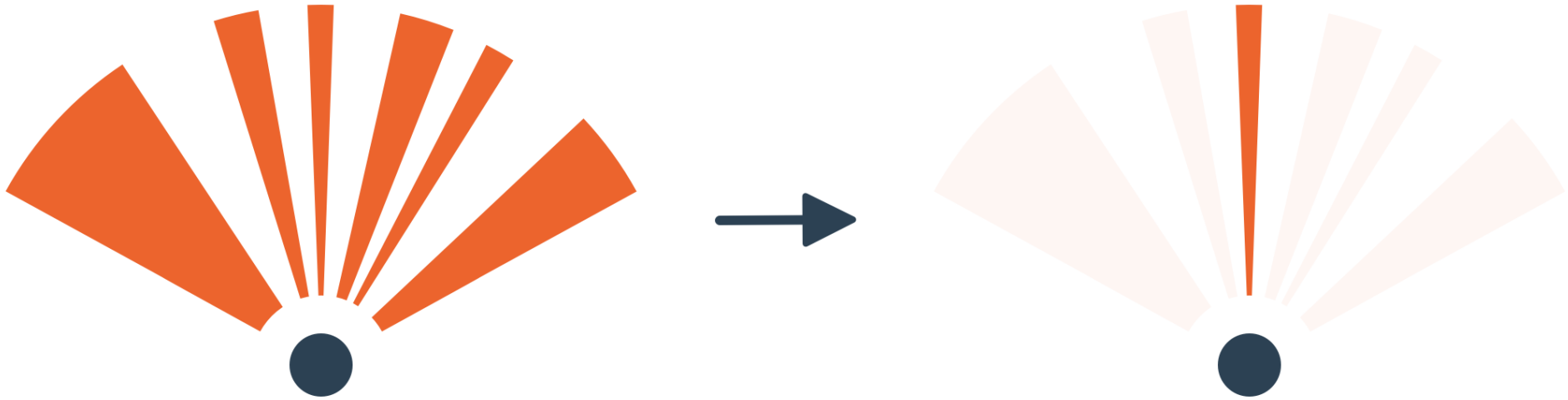


Simple Model of Learning

Goodrich, Mccrea & Lovell (2025) [adapted from Caviglioli, 2019; Willingham, 2009]

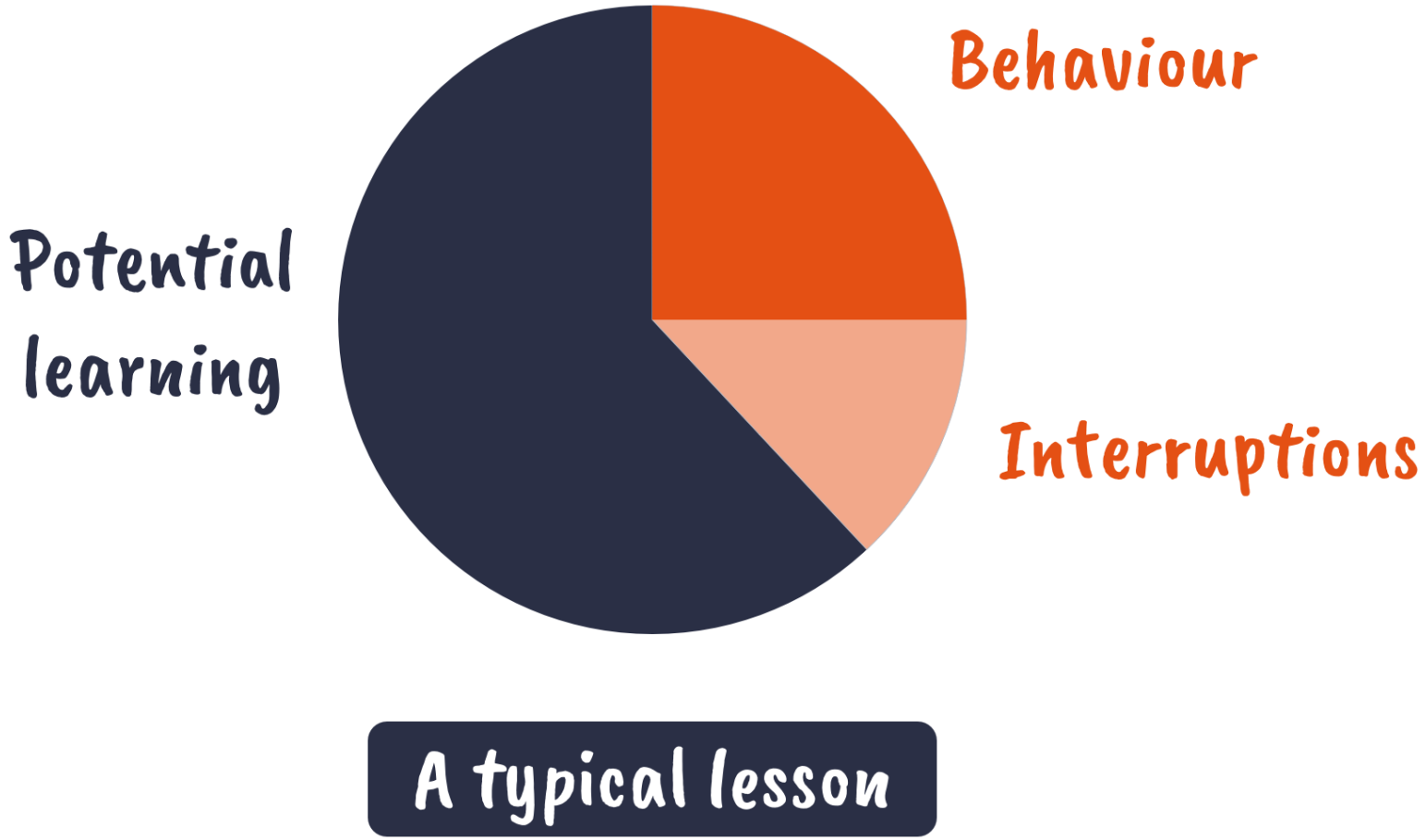

4. Optimise communication
Is the teacher presenting ideas in a manageable way for students?
5. Drive thought
Is the teacher pushing students to think hard?
3. Secure attention
Has the teacher got students' attention?
6. Gather & give feedback
Is the teacher assessing learning and responding?
ENVIRONMENT
WORKING MEMORY
ATTENTION
7. Ensure consolidation
Is the teacher helping students to consolidate their learning?
FORGETTING
2. Create culture
Has the teacher built the necessary routines, environment and behaviour for learning?
1. Select curriculum
Has the teacher selected the right ideas to teach?
Simple Model of Teaching
Goodrich, Mccrea & Lovell (2025) [adapted from: Caviglioli, 2019; Willingham, 2009]

1. Distractions
2. Ratio
3. Routines
4. Norms
5. Alignment

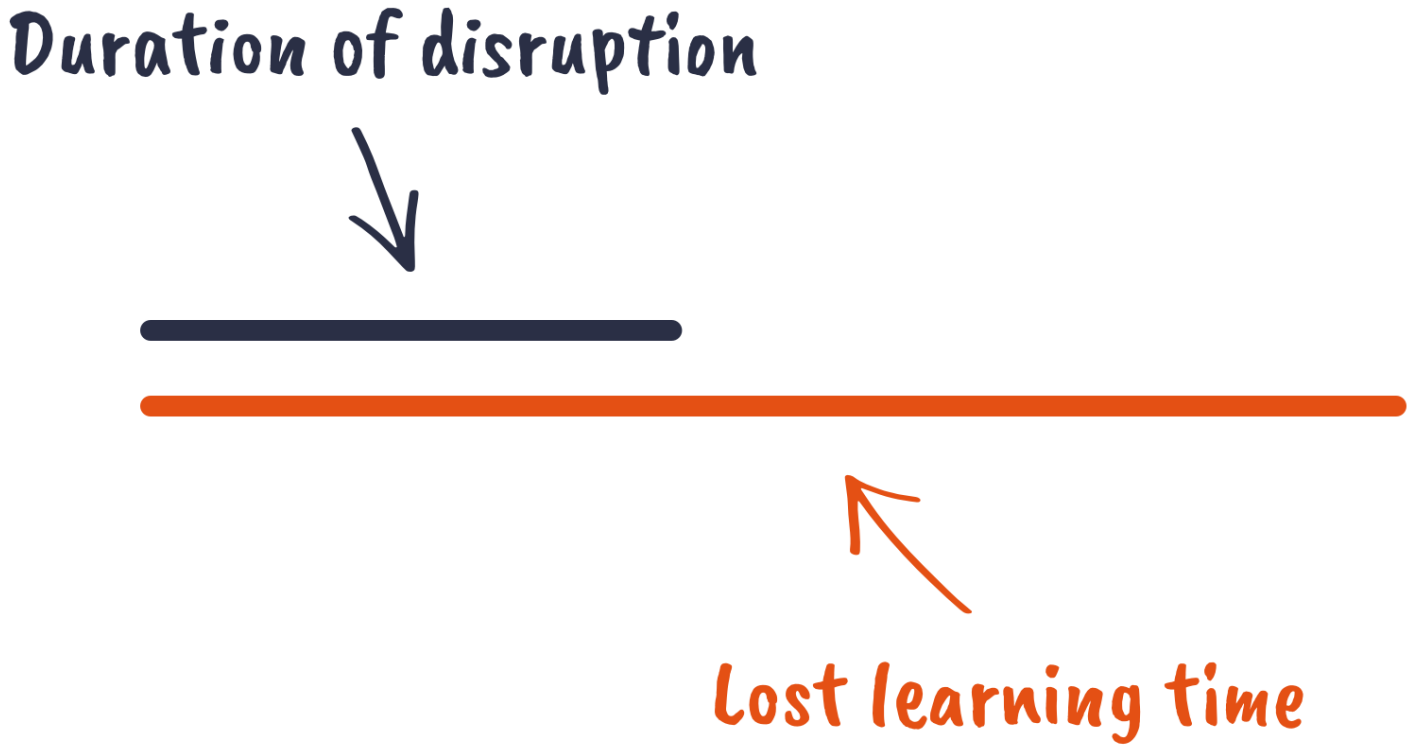


“We estimate that a typical classroom is interrupted more than 2,000 times per year, resulting in the loss of between 10 and 20 days of instructional time.”

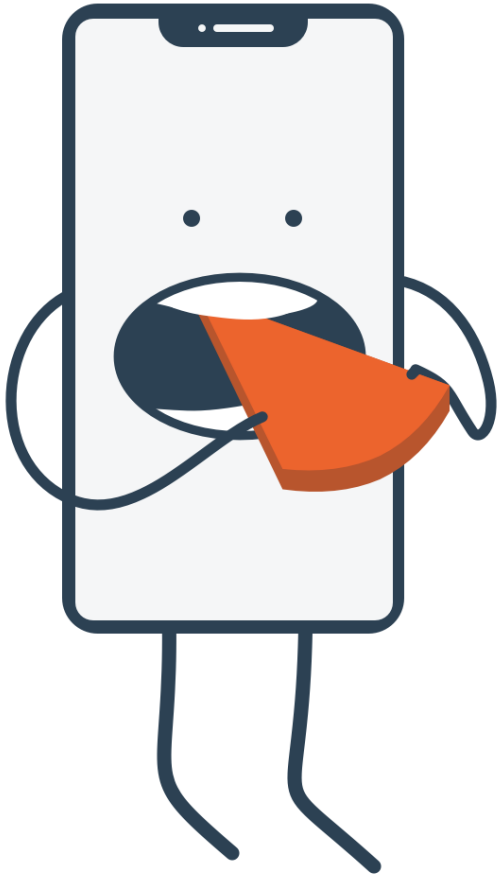
— Kraft & Monti-Nussbaum, 2021



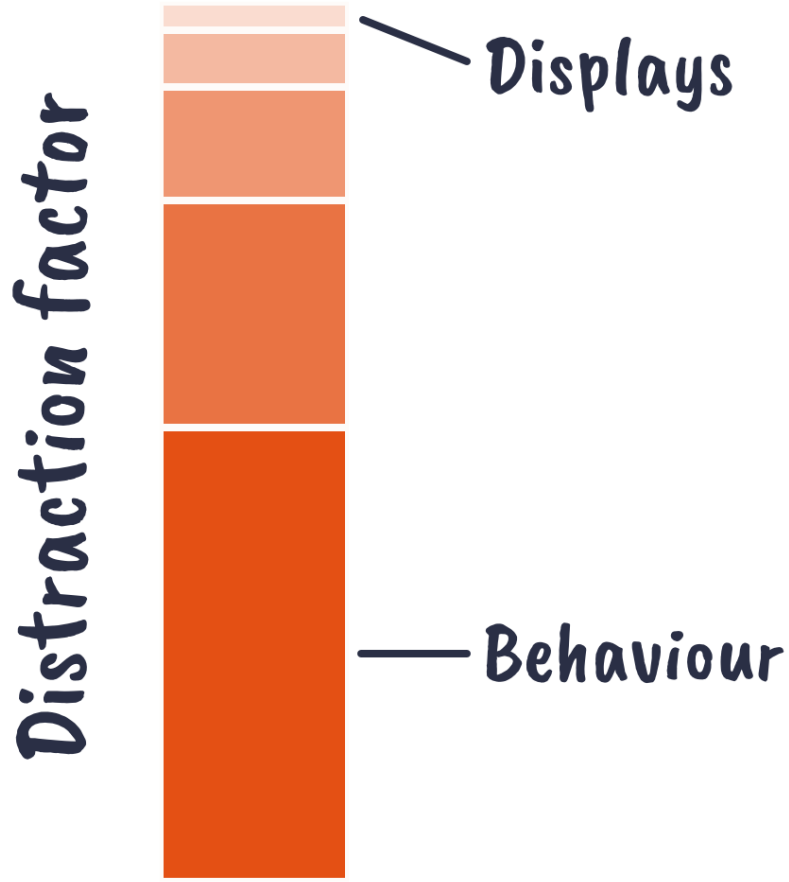
A typical lesson


Duration of disruption
Lost learning time

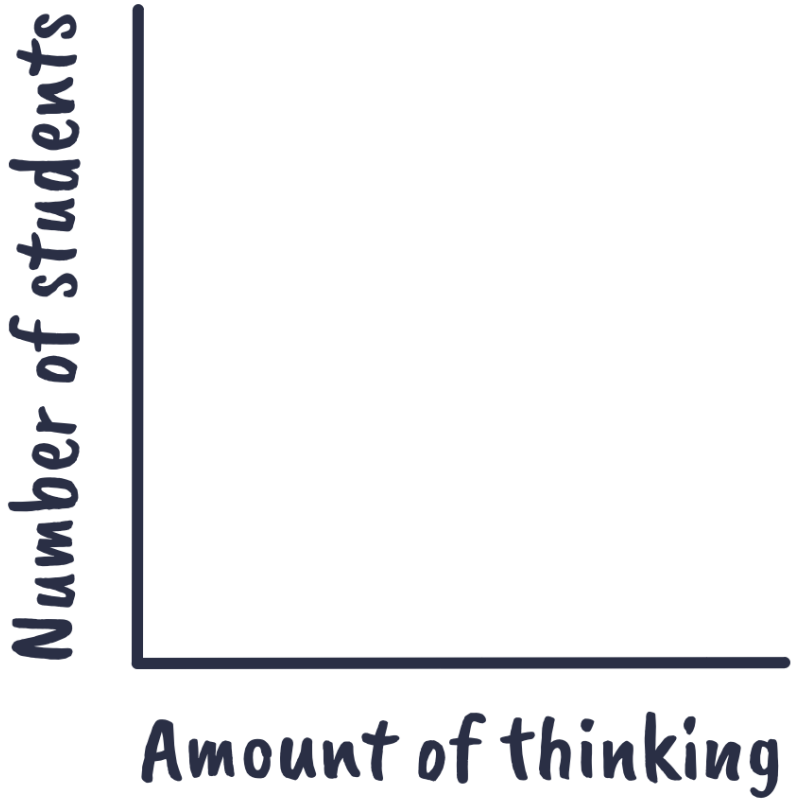
environment
social
tech
instruction



Attention

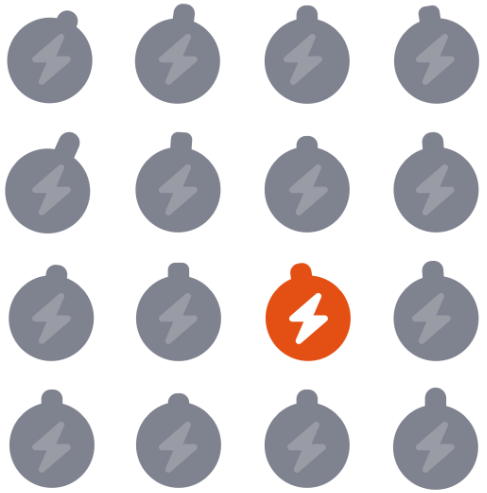

Distraction factor
Displays
Behaviour

1. Distractions
2. Ratio
3. Routines
4. Norms
5. Alignment


Number of students
Amount of thinking

Jo... what is a noun?

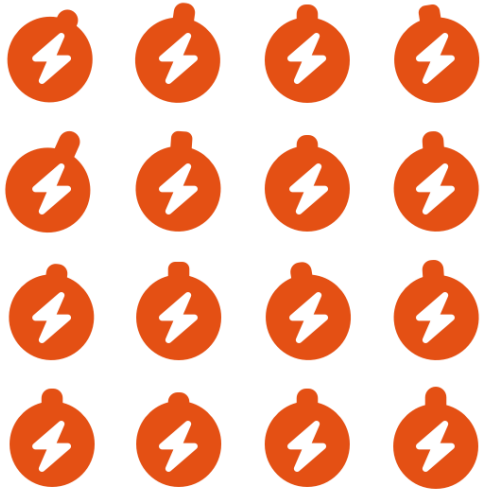
Only Jo is thinking



Inspired by the work of Doug Lemov

What is a noun... Jo?

All students are thinking



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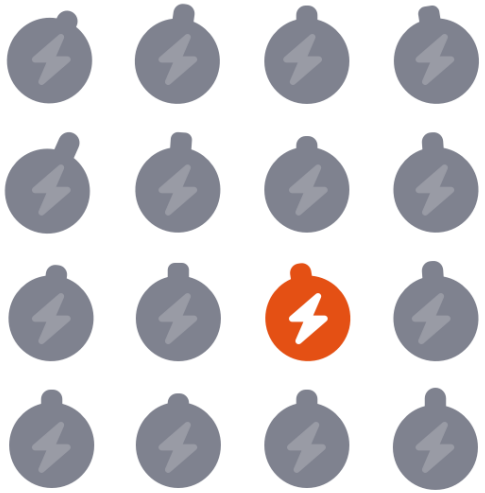
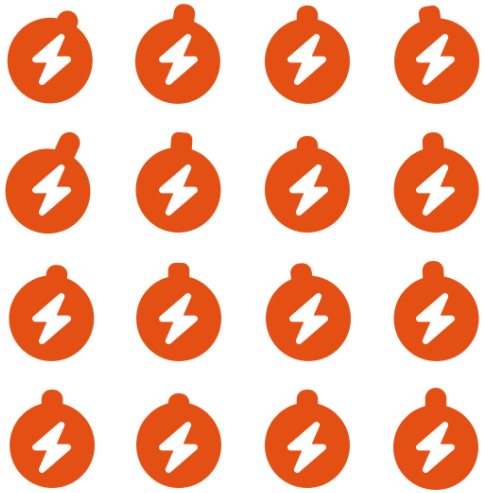


x20

What is a noun... Jo?

All students are thinking



What is a noun... Jo?

What is a noun... [waiting & scanning for 10 seconds]... Jo?

Inspired by the work of Doug Lemov

What is a noun? You have 20s to jot down your thoughts.

Now, you have 20s to share your ideas with your partner.

What is a noun... [waiting & scanning for 10 seconds]... Jo?

What is a noun... Jo?

All students are thinking

What is a noun? You have 20s to jot down your thoughts.

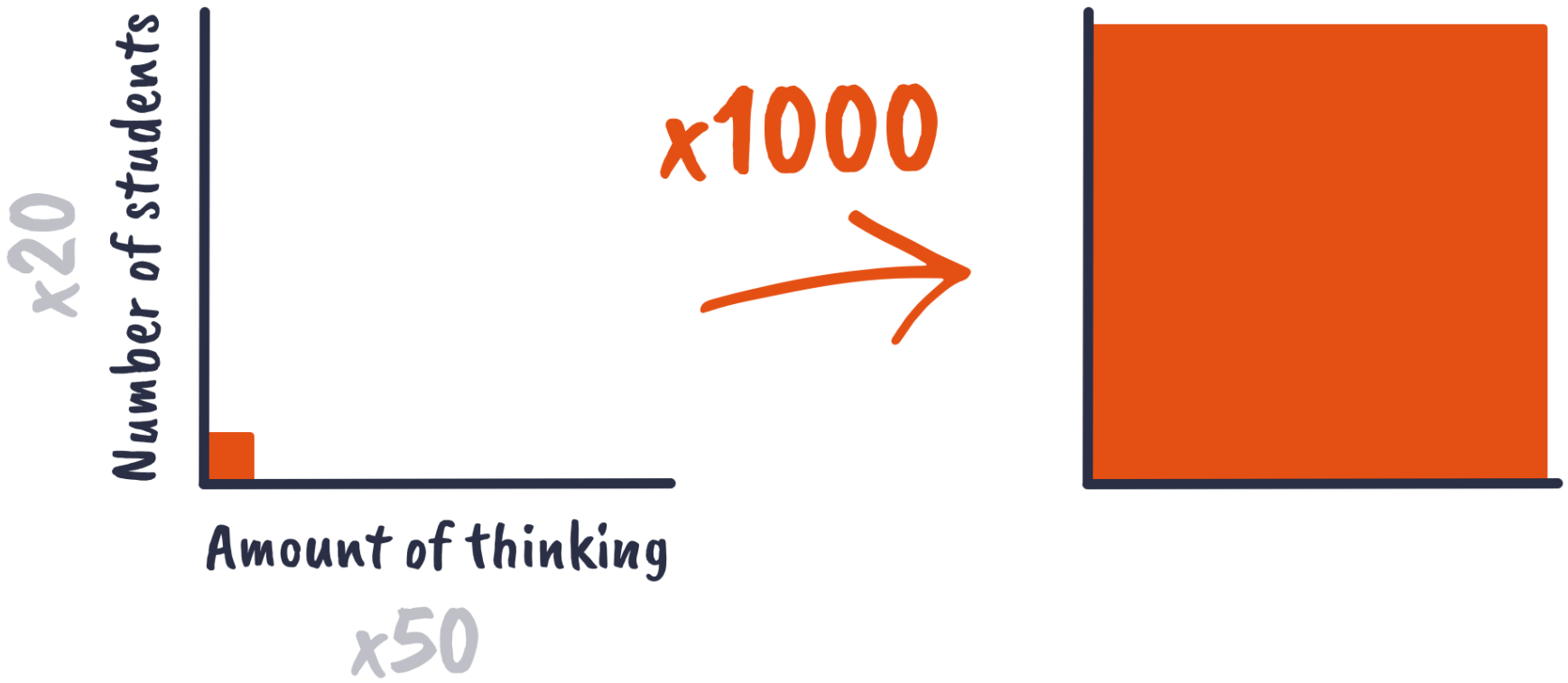
All students are thinking

Now, you have 20s to share your ideas with your partner.

All students are thinking

What is a noun... [waiting & scanning for 10 seconds]... Jo?

All students are thinking


x20
Number of students
Amount of thinking
x50
x1000

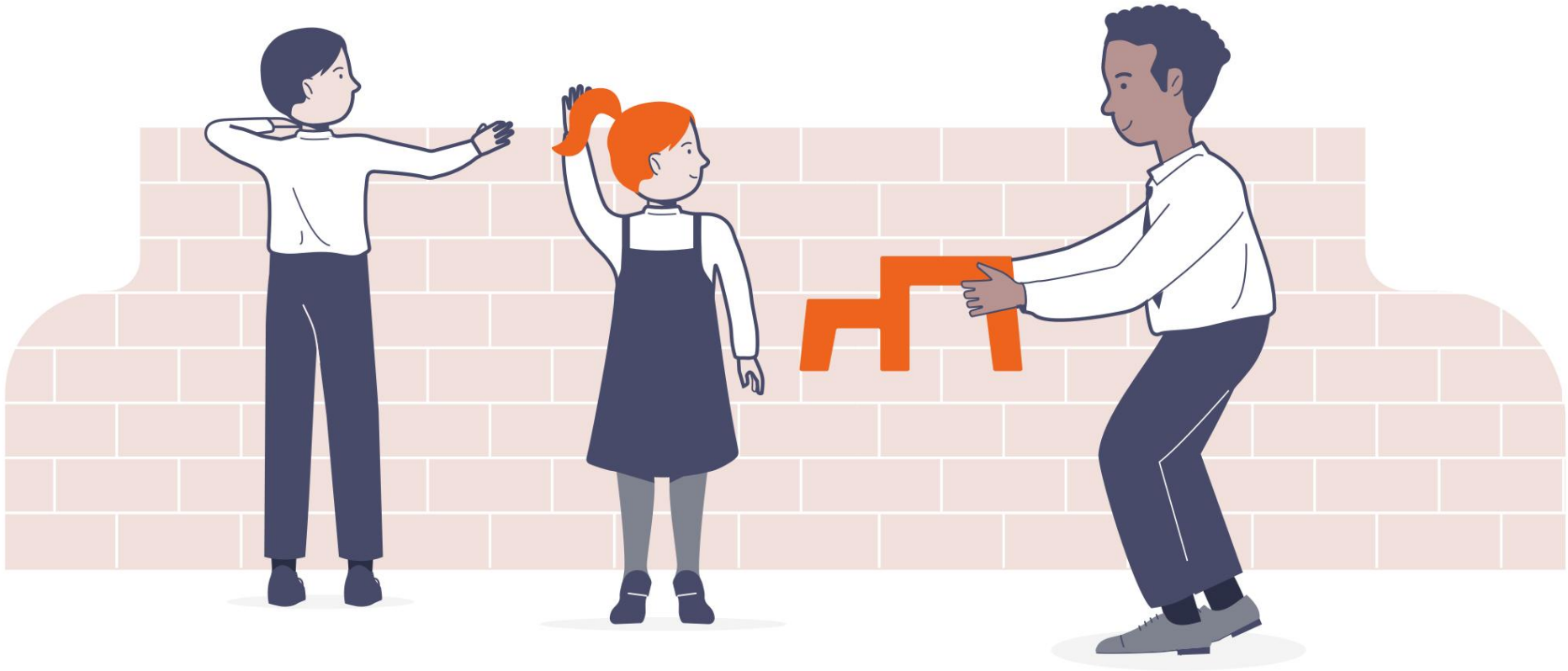
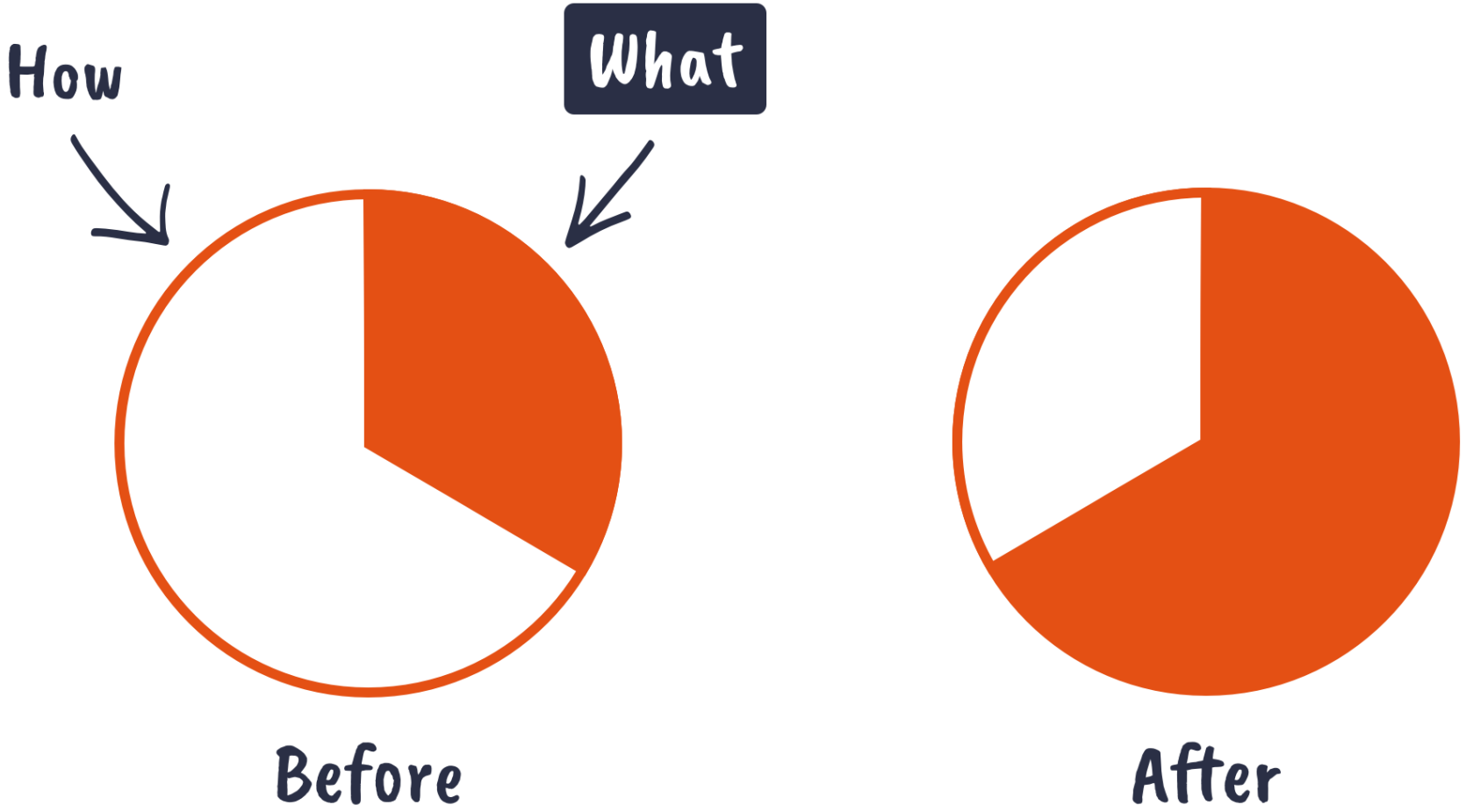
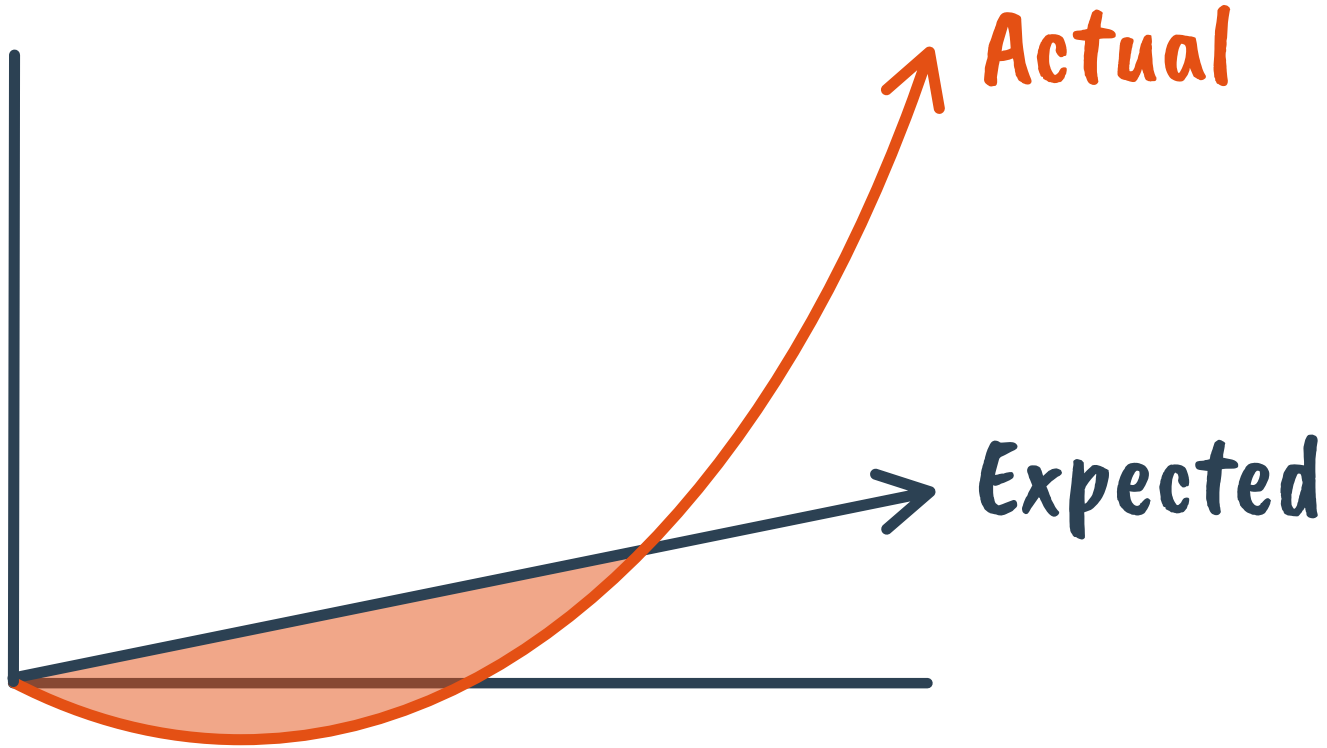


Image from Steplab

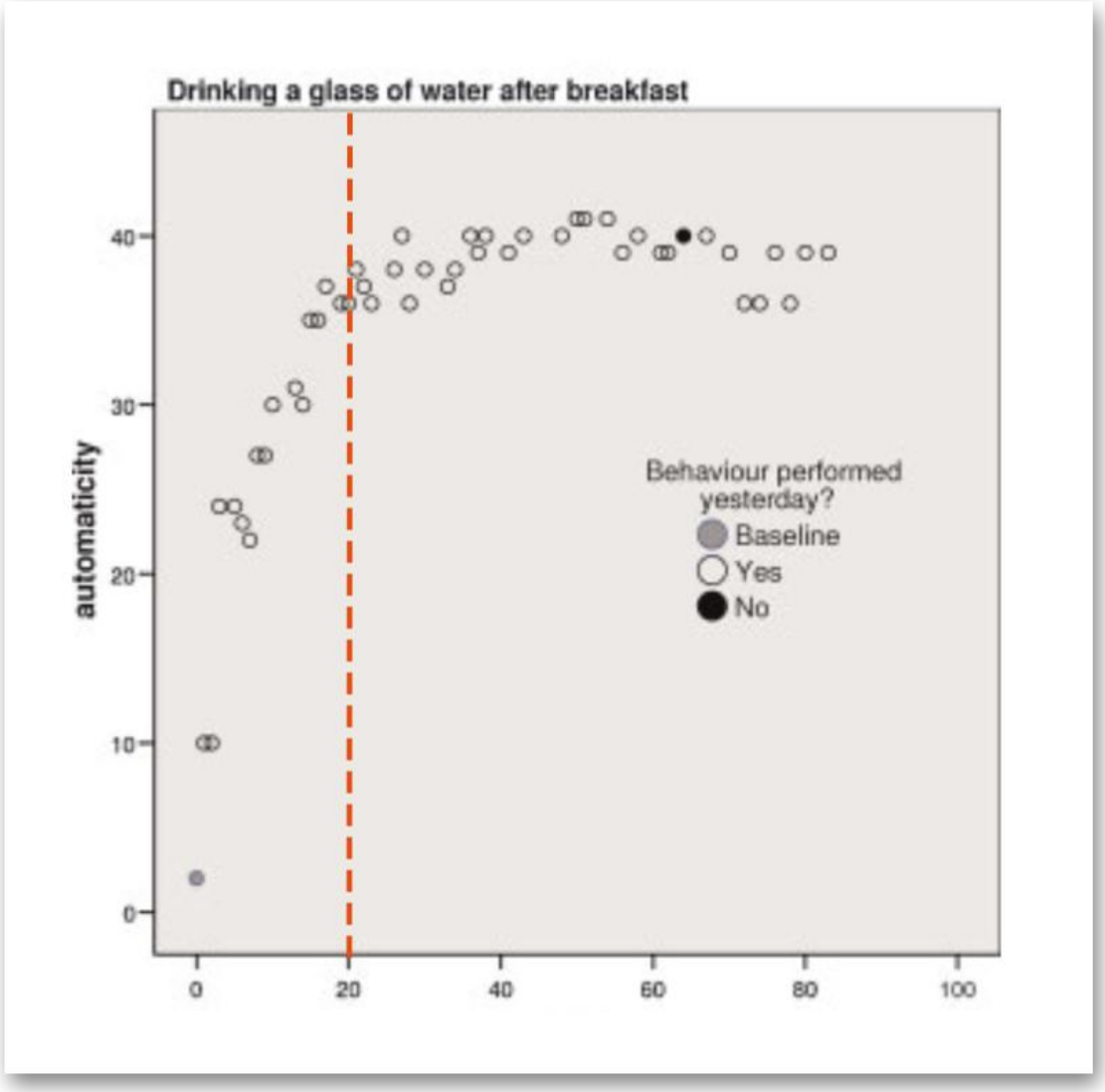
1. Distractions
2. Ratio
3. Routines
4. Norms
5. Alignment

Cue
Actions

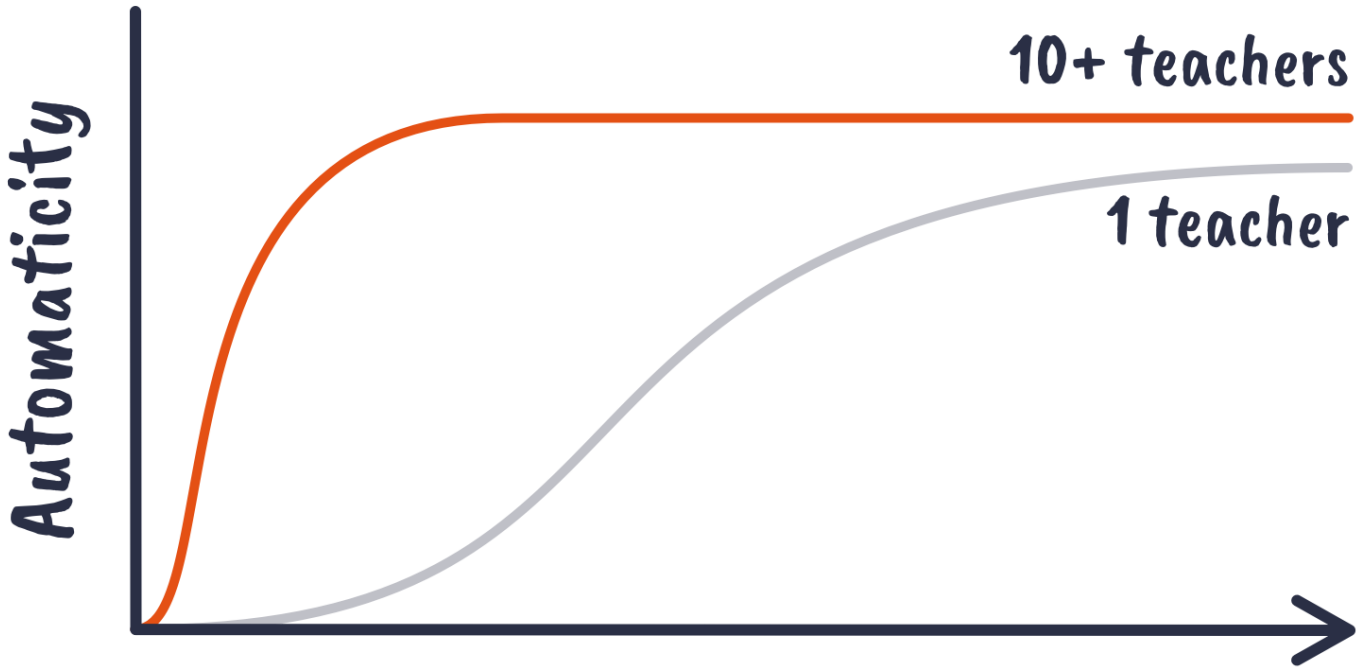

How
What
Before
After



Source: Clear (2008) Atomic Habits



(Gardner et al., 2012)


Automaticity
10+ teachers
1 teacher

1. Distractions
2. Ratio
3. Routines
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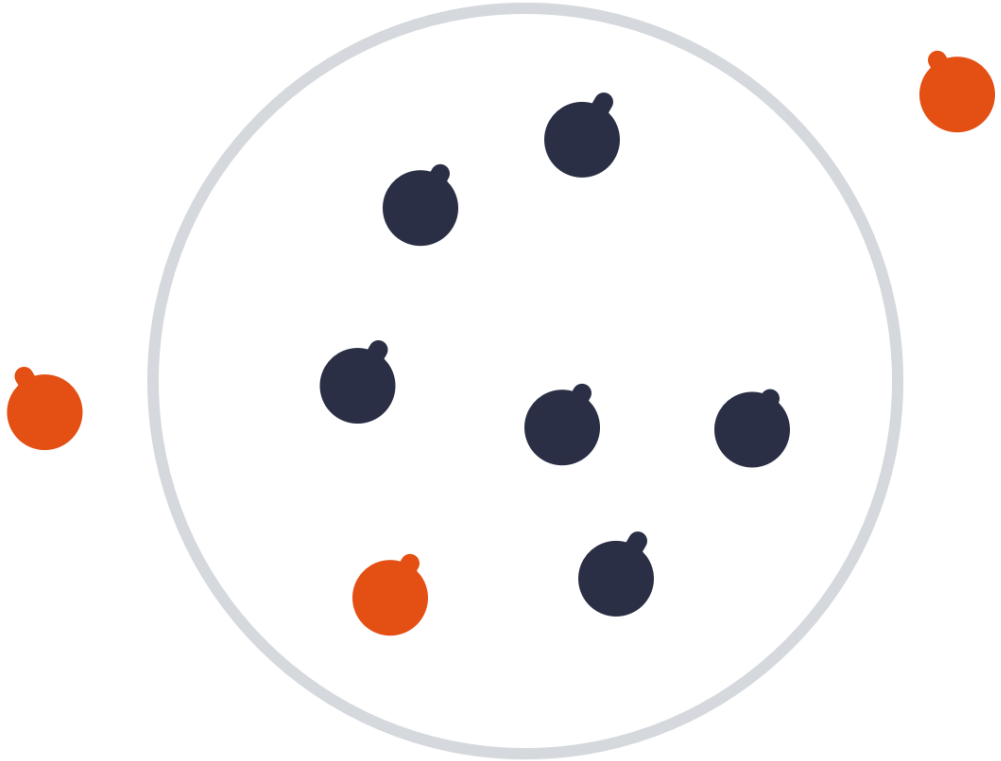
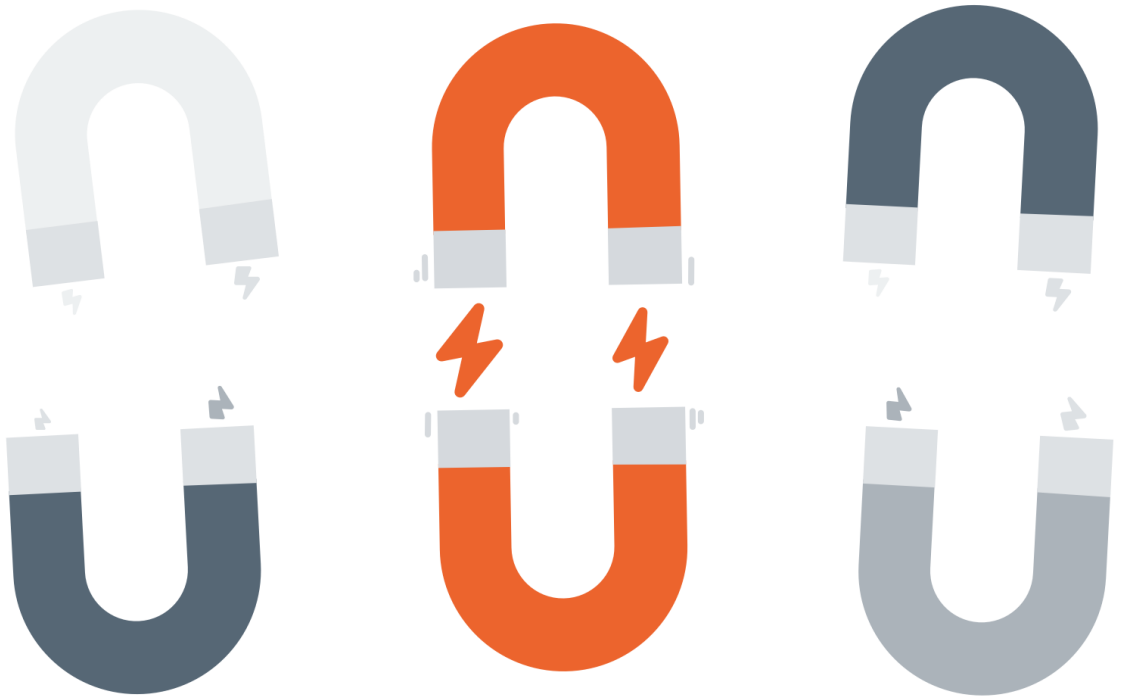
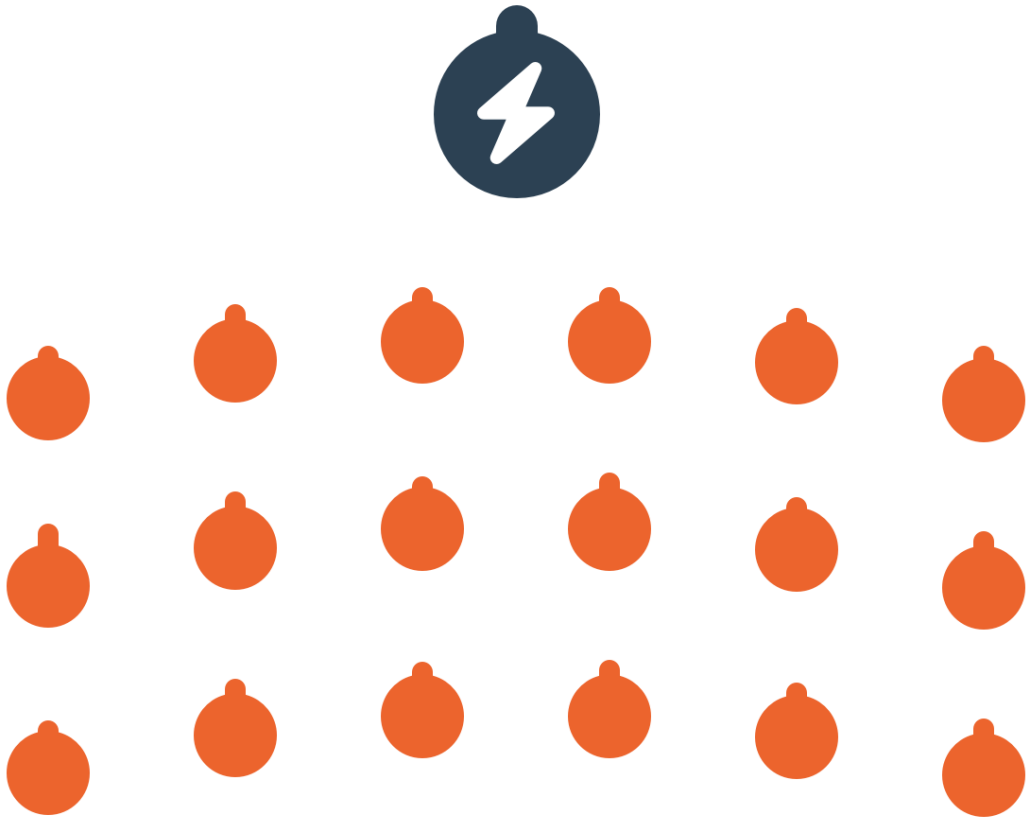
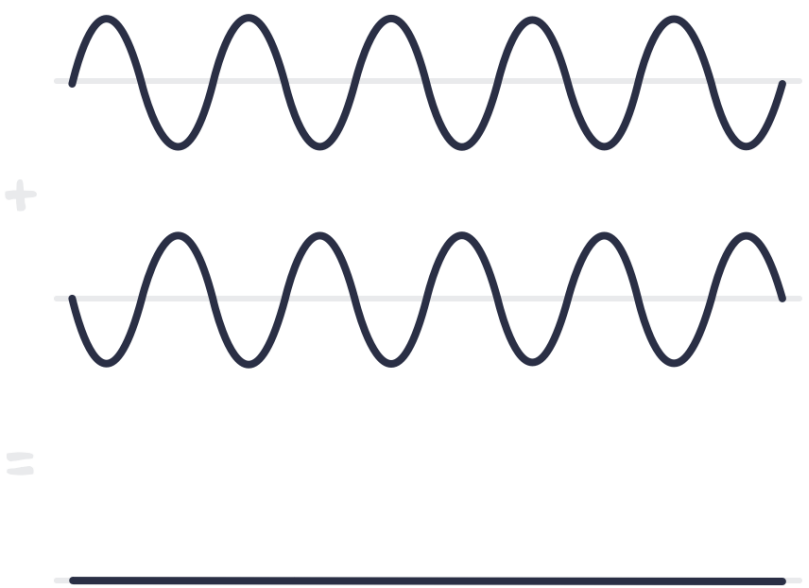
5. Alignment

School rules

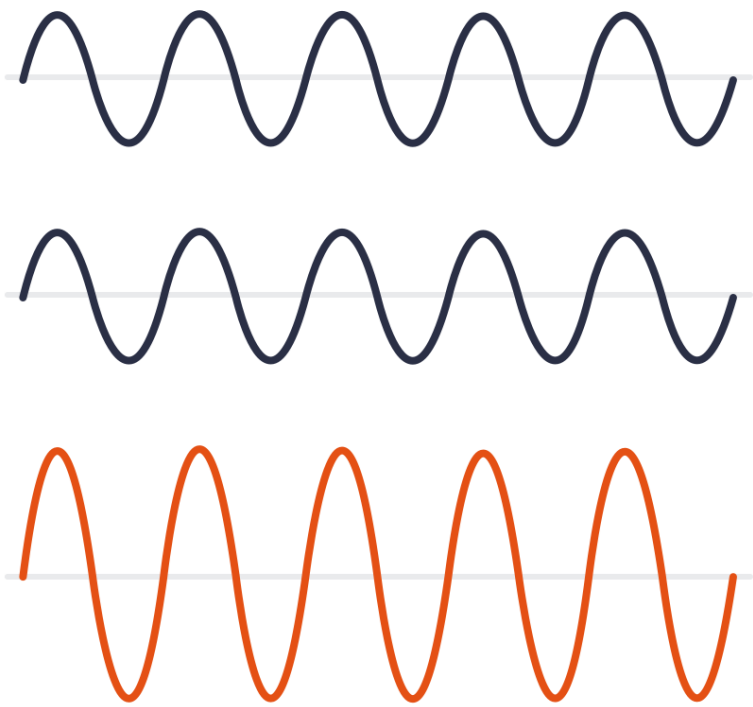








Misaligned



Aligned

1. Distractions
2. Ratio
3. Routines
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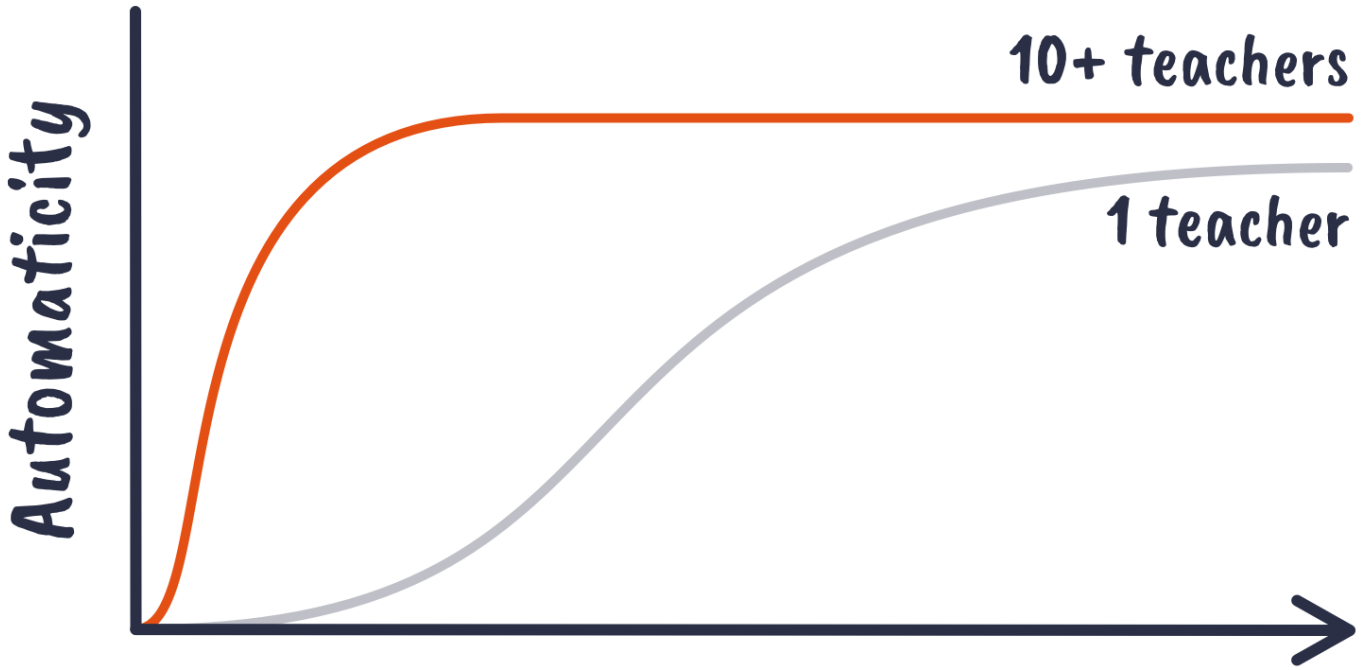
5. Alignment


Automaticity
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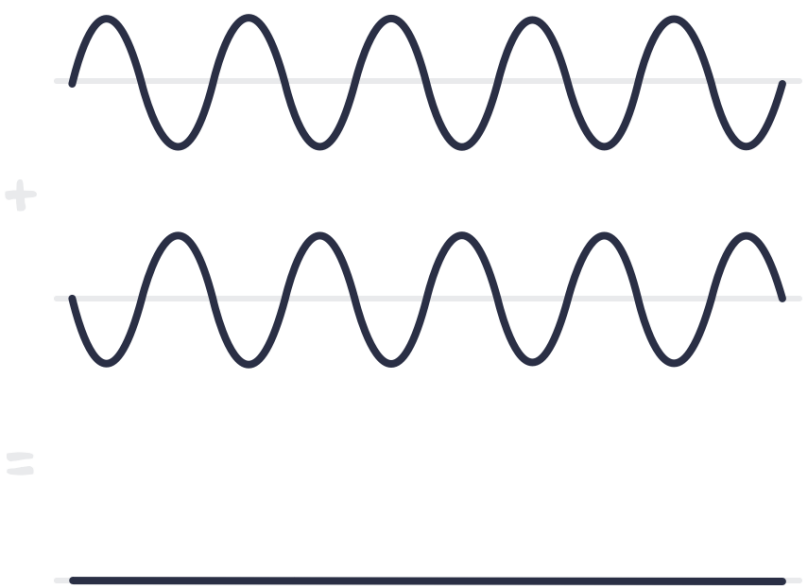

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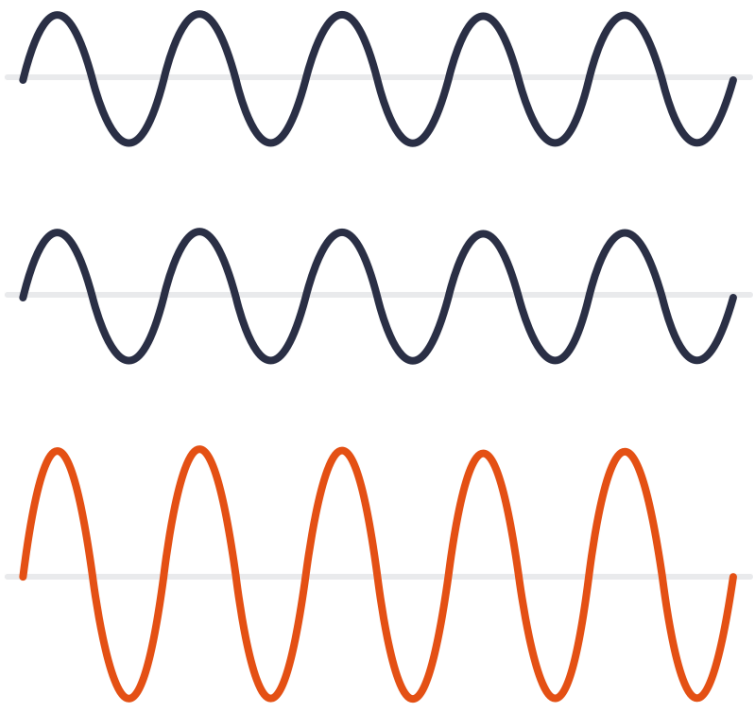

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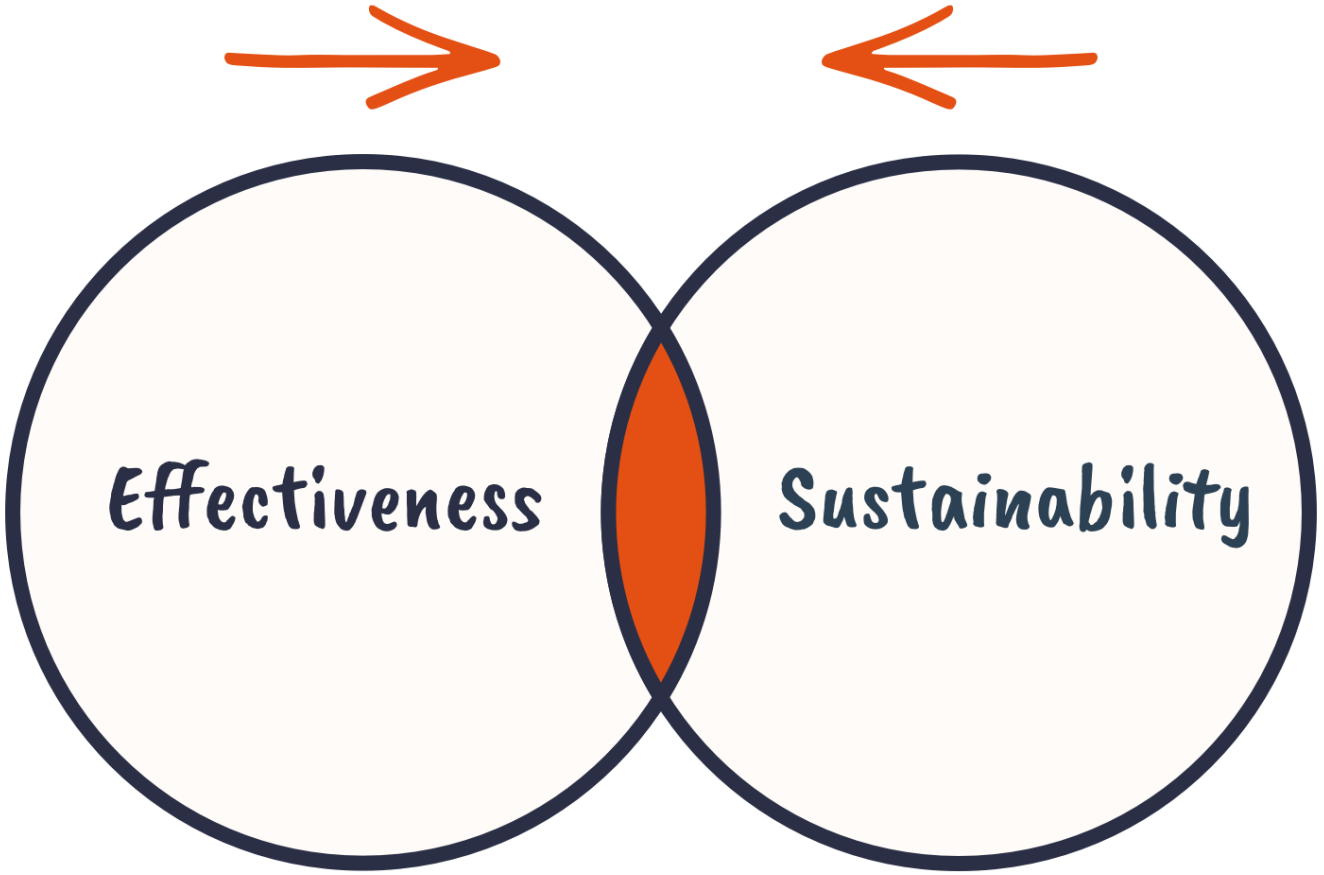
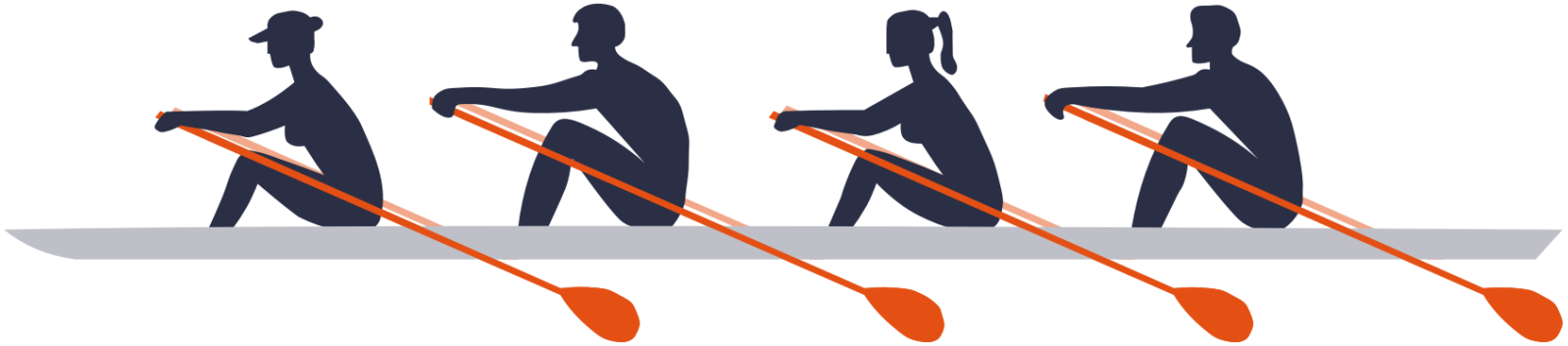

Effectiveness
Sustainability



Summary

1. Teaching is important but unintuitive—evidence can shore up our experience
2. **Distractions, ratio, routines, norms & alignment** are more powerful than we tend to assume—they are *high impact*
3. (Not only for student learning, but for belonging, equity & workload too 💪)

"Books that make
like this are few an
Doug Lemov
LEAN
LESS
PLAN
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