#### Must we face the fact that despite/even if we could ensure:

- every lesson being well taught, assessment for learning, differentiation, scaffolding,
- by excellent teachers, high expectations, good questioning and classroom management skills,
- to engaged learners, self motivated, independent revision and homework completion,
- with excellent parenting; supervise homework, encourage, support, engage with school,

#### low attaining maths learners will fall further and further behind their peers?

It has certainly seemed so<sup>1</sup>. Despite every effort to drive up the standard of teaching and learning within lessons; we fail to challenge with what happens after each lesson, that is **forgetting**.



#### timely practice says to effect change, we must think outside the traditional lesson box

We have **demonstrated** that maths learners who were classified as **low attaining**<sup>2</sup> with

- lessons that were not always perfect, learning isn't linear, planning is fallible, life intervenes,
- teachers who were mere mortals, time limited, deserve a work:life balance,
- learners with varying levels of engagement with learning, consistently  $\leftrightarrow$  struggled to engage,

close the learning gap and in many cases overtake their peers using

- similar/less outside of lesson assessment/planning/preparation time, easy, efficient, rewarding,
- accurate assessment for learning data, easy to teach in learners' sweet spot, fine detail, big picture,
- lesson time wisely, reduce overlearning, stealthy exam practice, more tightly spiralled curriculum,
- retrieval practice, low stakes, increasing interval, interleaved, regular, personalised pdf assignments,
- feedback, timely and therefore effective, frequency of subsequent practice responsive to need for,

#### facilitated by timely practice.



1: Ofsted, Mathematics: made to measure, 2012

<sup>2:</sup> low attaining: expected to get grade 3 or below at GCSE

# Results and analysis of 3 year timely practice trial

In one school, for two consecutive years, one of the two lowest attaining maths sets in each cohort, was chosen to be the timely practice class. Each of the learners within these classes completed a timely practice assignment almost every lesson of their 2 year GCSE course. The learners reviewed their assessed assignment from the previous lesson, and were given feedback when necessary.

2017 to 2019 cohort: 5 figure summary data for end of year and final GCSE exams.

KS2	End of year 9	End of year 10	End of year 11
4B	⊢-□	⊢–⊢ AT	TA H
3A	H∏→ TP	⊢ШТР	├───[]  TP
median	0 20 40 60 80 100%		% 0 20 40 60 80 100 %
3C	Ш сс	⊢ <u> </u>	⊢H cc
4B	H□□H AC	H AC	H AC
Kev	the timely pra	ctice "half" of the year th	e control "half" of the vear

Кеу	the timely practice "half" of the year	the control "half" of the year
Lowest attaining set	TP (timely practice)	CC (control class)
The set above	AT (above timely practice)	AC (above control)

2018 to 2020 cohort: 5 figure summary data for end of year and mock GCSE exams.

# KS2 End of year 9

# End of year 10

#### December year 11

4B	⊢ AT	AT and
2A-3C	H∏ TP	?…
median		
4C		H
4B	⊢––∏⊣ AC	CC begi



4

3

2

1

0 -

TΡ

CC

2017-19: school summary data

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"Number of levels" progress since KS2.

2AT

2AC

lowestlow-midmiddle UQ up-mid



4AC

4AT

# The big picture

## 2017 to 2019 cohort

- TP closes the learning gap with AT
- $\bullet$  TP progress on parr with 2 sets above  $\rightarrow$

## 2018 to 2020 cohort

 $\bullet$  TP closes the learning gap with AT

## **Provisional conclusion**

Regular timely practice, enables classes of low attaining maths learners to close the learning gap with their peers. However more testing will enable this to be said with greater confidence.

Levels progress (mean)

Interested in trying timely practice in your school? Join our free 1 term or 2 term trial to

- find the proportion of learning that your low attaining maths learners' are currently forgetting,
- see if learners can recall and accurately apply significantly more learning with timely practice.