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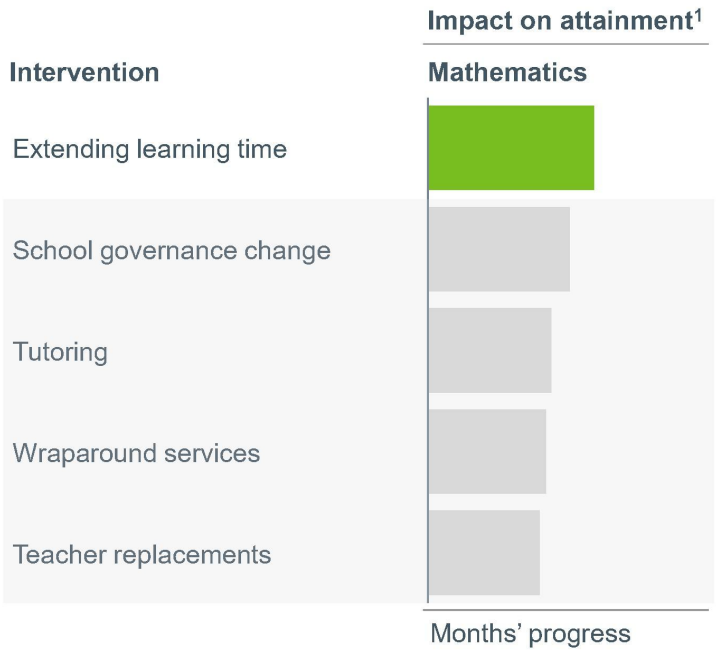
ERC: IMPACT OF EXTRA TIME

UPDATE TO THE PRIME MINISTER

Wednesday 5 May

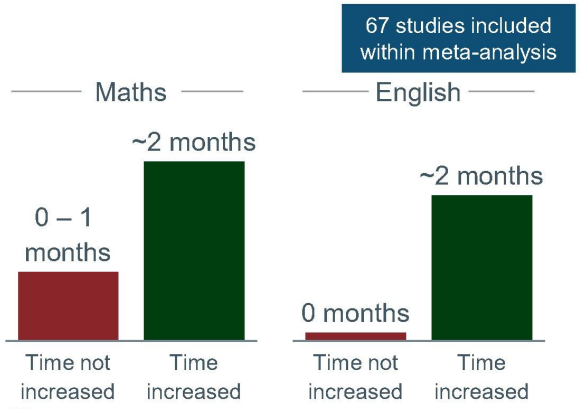
Extra time is an essential element to enable system turnaround

Within successful school reforms, time is the single most powerful ingredient…



… and is a critical in determining a programme's overall effectiveness

Example: Harvard University research on key elements of turnaround programmes[2]



> We find that the **most promising features** of school improvement efforts include extended learning time…

1. Schueler *et al*: Improving Low Performing Schools: A Meta-Analysis of Impact Evaluation Studies. Top 5 interventions shown for Mathematics only, excluding 'School Choice' as not relevant to current. Standard Effects converted to months progress using EEF Additional Progress Measures. 2. Ibid. 3. EEF Toolkit

Key research findings

Extending time is the most effective turnaround approach

- A 2020 meta-analysis[2] shows time as the key attainment intervention
- Improvement is consistent across subjects (English and maths)

Impact of extended time is consistent across studies

- The EEF finds the same time-attainment link[3]

Benefits greatest for low-performing students

- Disadvantaged pupils have greater academic and non-academic benefit *[deep dive follows]*

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The benefits of an extended school day are greatest for the most disadvantaged

Lowest performing students have the greatest academic uplift

The productivity of instructional time is…

35%

…higher for pupils from low education families, than pupils from high education families

Lavy *et al* (2014)[1]

Disadvantaged children and parents gain wider benefits

For children…

- Increases access to 'learning spaces,' unavailable at home[1]
- Increases opportunity to enjoy enrichment and physical activity[2]

For parents…

- Reduces the costs and time required for childcare
- Increases time for other activities (including employment)

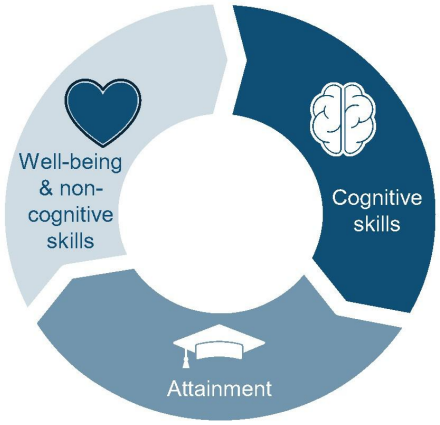
Increased time is already a key recommendation to reduce inequality

> **The Commission recommends** that the Secretary of State for Education…urgently considers **phasing in an extended school day**, led by evidence showing the **positive impact** of a longer school day for **disadvantaged pupils**…
>
> *Commission on Race and Ethnic Disparities (March 2021)*

1. Lavy *et al* (2014) Do Differences in Schools' Instruction Time Explain International Achievement Gaps? 2. OECD shows higher attainment amongst pupils who have access to a dedicated learning space to conduct homework 3. For example, SportsEngland research shows 35% children from less affluent families engage in <30 minutes of physical activity per day, compared to 22% of children from more affluent families (Active Lives Children and Young People Survey, 2019)

Additional time is also crucial for wellbeing and will multiply the impact of other elements of the recovery plan

Increased time is needed for enrichment activities to improve wellbeing, which enables children to learn…



- Non-cognitive skills are crucial for developing cognitive skills[1]
- Pupils with higher levels of emotional wellbeing and non-cognitive skills have higher levels of academic success[2,3,4]…

…and ensures that the greatest benefits are realised from other components of the package

1 …**teacher** receiving high quality **professional development**

× **90**[5] …**minutes** of additional **teaching** time to a class **each week**

× **27**[6] …**pupils per class** taught by trained teacher

= **4,634** …**hours** of **improved teaching** received by pupils, over 3 years[7]

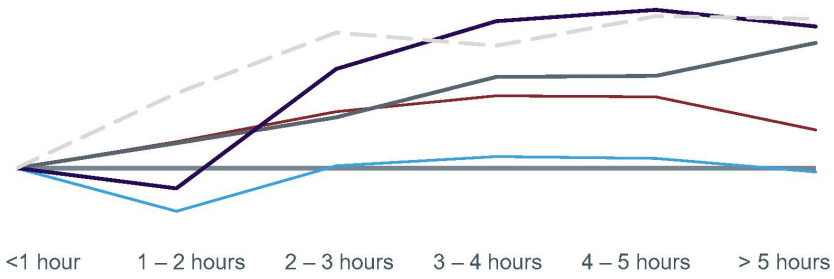
A package without time does not provide support related to emotional or physical wellbeing and will not realise the full potential of the recovery package

1. Heckman Institute 2. DfE research 3. Public Health England – The link between pupil health and wellbeing and attainment (2015) 4. OFSTED school inspection reports. 5. Assumes 90 of out 150 extra minutes of increased time each week are used for academic activities, with the remainder used for non-academic support. 6. Average class size of 27.1 students for a primary school (DfE data). 7. Based upon 190 working days/38 weeks in the average school year (DfE data).

Challenge | Do returns on time plateau?

An apparent 'results plateau' in correlational data is likely to be misleading…

Example: PISA Maths score by weekly hours of learning, index to <1 hour per week[1]



Based on OECD PISA results

…and is not reflected by higher-quality studies[2] or causal evidence

- Correlating learning time to outcomes is difficult: extra teaching may be given because pupils are behind
- With PISA data, Lavy *et al* controls for school and individual characteristics (e.g. underlying ability) to isolate the impact of time
- With these controls in place, Lavy shows "*increased instructional time has a positive and significant effect on academic achievement*"
- The effects are larger for pupils from lower socioeconomic backgrounds
- The paper concludes: **"*Overall, the effects of instructional time are large, relative to other school-level interventions for which we have reliable evidence.*"**
- The highest-quality causal studies show extra time can improve grades, even when raised above OECD averages (e.g. Huebener et al)[3]

1. OECD: PISA Results (Volume V) - Learning time during and after school hours (2018). 2. Lavy (2014): Do Differences in Schools' Instruction Time Explain International Achievement Gaps? 3. Huebener et al. (2017) Increased instruction hours.