
Title registration for a systematic review:

The effectiveness of homework in primary school: a systematic review

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Submitted to the Coordinating Group of:

Crime and Justice

Education

Disability

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Nutrition

Food Security

Social Welfare

Methods

Knowledge Translation and Implementation

Business and Management

Other:

Plans to co-register:

No

Yes Cochrane Other

Maybe

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Title of the review

The effectiveness of homework in primary school: a systematic review

Note: We have deliberately not included the primary outcomes of interest in the title as these will be chosen on the basis of consultation with school leaders, teachers, parents and primary school children. We will revise the title accordingly at protocol stage once this process has been completed.

Background

Homework in primary school refers to any work set by teachers for pupils to complete outside of their formal lessons. Homework in primary school is set by teachers for a wide variety of reasons. Homework may be set in order to consolidate learning, to address specific learning needs tailored to each child, to practice key skills such as reading or fine motor skills or to prepare for in-class learning in advance. In addition to pedagogical reasons, homework may also be set to equip children with skills for independent learning, such as managing their time, prioritising tasks and meeting deadlines, in order to prepare for secondary school or as a means to motivate and inspire confidence and enthusiasm in children. Finally, homework may be set for other purposes for example; to engage parents in their child's learning, as punishment, to satisfy the demands of school management and/or parents, to deliver the curriculum, or simply out of habit.

Attitudes towards homework, particularly in an American context, have been cyclical, with homework branded a “sin against childhood” (Gill & Schlossman, 1996) in the early 20th century, while the launch of Sputnik in 1957 increased support for homework as essential in preparing children for a competitive global technological future (Gill & Schlossman, 2004). In the more recent past views on homework continued to be polarised (Tam & Chan, 2016).

Policy relevance

There is wide variation in the guidelines provided to primary schools in relation to the amount, duration and purpose of homework internationally. For example, in the US, the National Education Association and the National Parent Teacher Association endorse a “ten minute rule” with a daily limit of 10 minutes of homework per grade for elementary pupils (Walker, 2017). Guidelines for primary schools in Australia do not recommend any set duration for homework and instead focus on the quality and purpose of the homework (e.g. (Government, 2018) and encouraging schools to consider the need for students to have a balanced lifestyle. The UK has no current guidelines on homework in either primary or secondary school, preferring to allow school heads to decide their own policies on homework (DFE, 2018). However, legislation is in place to allow schools to sanction or discipline children who do not complete homework set by teachers, effectively making homework

optional at the school level but not for individual children (DFE, 2006). Elsewhere in Europe; Finland has a “no homework” policy yet remain near the top of the PISA rankings; The Maltese government recommends between 20 mins and 1 hour of homework per day in primary school but emphasises the importance of quality, play and balance with leisure time (*National Homework Policy*, 2018); France has implemented the Homework Done program since 2017 where pupils complete homework in school (MNE, 2019). South American governments have debated whether to eliminate homework by law but decided against changing law in 2017 (Guzmán, 2017). Malaysia issued a circular in 2004 which aimed to formalise homework policies amid fears Malaysian students were completing more homework than their south-east Asian counterparts (Education, 2004). This did not formalise the time spent on homework but focussed on the enjoyment of homework and the purposefulness of completing it.

This review will contribute to the international evidence base on the effectiveness of homework for primary schools and help to inform evidence-based policy developments in this area.

Objectives

This review will synthesis the extant research on the benefits and potential harms of homework in primary schools.

The primary and secondary outcomes will be refined in consultation with a range of stakeholders including education policy makers, school leaders, teachers, parents and pupils themselves. We anticipate that the likely outcomes may include; academic attainment, parental engagement, pupil self-management skills. We will also seek to understand the impact of homework on educational inequalities by conducting analysis on the relationship between family socio-economic status and the effect of homework on the outcomes chosen.

Our review questions will likely include:

1. What impact does homework in primary school have on (*primary outcomes to be defined*)?
2. Does homework differentially effect children in primary school depending on family socio-economic status?
3. What characteristics of homework in primary school moderate its impact on learning?
4. Is their evidence of unintended consequences of homework for primary school children?

Existing reviews

There are currently no existing Campbell reviews on homework, in either primary or secondary level education. A search of PROSPERO , International Initiative for Impact Evaluation (3IE) and EPPI-Centre database of education research on 14th December 2018 found no relevant current or ongoing reviews. There are however, four other existing

systematic reviews that are relevant. Cooper (1989) conducted an extensive systematic review of homework in both primary and secondary education and concluded that homework in primary school has no effect on attainment. Cooper, Robinson & Patall (2006) conducted an update of Cooper (1989) and synthesised six experimental studies conducted between 1987 and 2003, five of these related to primary school age children. The Canadian Council on learning (2009) conducted a review of studies reported between 2003 and 2007. These existing reviews have been conducted to a very high standard but they are now over 10 years old. We have identified a number of studies produced since their publication (Dettmers, Trautwein, & Lüdtke, 2009; Falch & Rønning, 2011; Fernández-Alonso, Álvarez-Díaz, Suárez-Álvarez, & Muñiz, 2017; Gustafsson, 2013; Rønning, 2011; Trautwein, 2007; Trautwein, Schnyder, Niggli, Neumann, & Lüdtke, 2009) and believe an update is warranted. Finally, Fan et al. (2017) published a meta-analysis of the effect of homework on mathematics and science achievement. Our proposed review will include a broader range of subjects and outcomes.

Intervention

Homework in primary school refers to any work set by teachers for pupils to complete outside of their formal lessons.

Comparisons will include, but not be limited to, no homework, in-school/class study, homework assignments of different types (for example compulsory vs voluntary) or homework purposes (e.g. pre-learn, catch-up, consolidation of learning).

Homework set as part of a wider intervention program, where the effect of homework cannot be isolated from other aspects of the intervention, will not be included, for example homework on healthy eating as part of an obesity prevention intervention.

Population

Children in primary level education typically referred to as primary or elementary school. These children are typically aged 4-11 years old.

Outcomes

The outcomes chosen for this review will reflect the priorities and concerns identified in consultation with a range of stakeholders including education policy makers, school management, school leaders, teachers, parents and pupils. However, we anticipate that the primary outcomes are likely to be attainment (grades or national tests) and progress. Other possible outcomes may be behaviours and skills related to learning. We will also seek to uncover any unintended consequences of homework, such as widening of educational inequalities.

Study designs

We intend to include any controlled studies where students given homework are compared to a control or comparison condition of no homework, alternative to homework or homework of a different nature or purpose.

Studies with no control or comparison group, unmatched controls or national comparisons with no attempt to control for relevant covariates will not be included. Case studies, opinion pieces or editorials will not be included.

We will include qualitative studies only if they are conducted as part of a controlled effectiveness study, for example a process evaluation of an RCT.

References

- Cooper, H. (1989). Synthesis of research on homework. *Educational leadership*, 47(3), 85-91.
- Cooper, H., Robinson, J. C., & Patall, E. A. (2006). Does homework improve academic achievement? A synthesis of research, 1987–2003. *Review of educational research*, 76(1), 1-62.
- Dettmers, S., Trautwein, U., & Lüdtke, O. (2009). The relationship between homework time and achievement is not universal: Evidence from multilevel analyses in 40 countries. *School Effectiveness and School Improvement*, 20(4), 375-405.
- Sections 90 to 92 of the Education and Inspections Act 2006, Sections 90 to 92 C.F.R. (2006).
- DFE. (2018, 28 October 2018). Education Secretary: I trust head teachers to decide their homework policies. *Education in the media*. Retrieved from <https://dfemedia.blog.gov.uk/2018/10/28/education-secretary-i-trust-head-teachers-to-decide-their-homework-policies/>
- Education, M. o. (2004). *Surat Pekeliling Ikhtisas Bil. 12/2004. Garis Panduan Umum Pemberian Kerja Rumah Kepada Murid Sekolah* Kuala Lumpur: MOE.
- Falch, T., & Rønning, M. (2011). Homework assignment and student achievement in OECD countries. *Oslo: Department of Economics/Norwegian University of Science and Technology*.
- Fan, H., Xu, J., Cai, Z., He, J., & Fan, X. (2017). Homework and students' achievement in math and science: A 30-year meta-analysis, 1986–2015. *Educational Research Review*, 20, 35-54.
- Fernández-Alonso, R., Álvarez-Díaz, M., Suárez-Álvarez, J., & Muñiz, J. (2017). Students' Achievement and Homework Assignment Strategies. *Frontiers in Psychology*, 8(286). doi:10.3389/fpsyg.2017.00286
- Gill, B., & Schlossman, S. (1996). "A Sin against Childhood": Progressive Education and the Crusade to Abolish Homework, 1897-1941. *American Journal of Education*, 105(1), 27-66. doi:10.1086/444143
- Gill, B., & Schlossman, S. (2004). Villain or savior? The American discourse on homework, 1850-2003. *Theory into practice*, 43(3), 174-181.
- Government, V. S. (2018). *Homework Guidelines*. Australia Retrieved from <https://www.education.vic.gov.au/school/principals/spag/curriculum/Pages/guidelines.aspx>.
- Gustafsson, J.-E. (2013). Causal inference in educational effectiveness research: A comparison of three methods to investigate effects of homework on student achievement. *School Effectiveness and School Improvement*, 24(3), 275-295.
- Guzmán, F. (2017, 18 March 2017). Comisión que revisó caso tareas escolares descarta prohibirlas por ley. *La Tercera*. Retrieved from

<https://www.latercera.com/noticia/comision-reviso-caso-tareas-escolares-descarta-prohibirlas-ley/>

- Learning, C. C. o. (2009). *A systematic review of literature examining the impact of homework on academic achievement*. Retrieved from Toronto:
- MNE. (2019). *Encouraging student success: Homework Done* www.education.gouv.fr
Retrieved from <http://www.education.gouv.fr/cid131710/encouraging-student-success-homework-done.html>.
- National Homework Policy*. (2018). Malta Retrieved from <https://education.gov.mt/Documents/Homework%20Policy.pdf>.
- Rønning, M. (2011). Who benefits from homework assignments? *Economics of Education Review*, 30(1), 55-64.
- Tam, V. C., & Chan, R. (2016). What Is Homework For? Hong Kong Primary School Teachers' Homework Conceptions. *School Community Journal*, 26(1), 25-44.
- Trautwein, U. (2007). The homework–achievement relation reconsidered: Differentiating homework time, homework frequency, and homework effort. *Learning and Instruction*, 17(3), 372-388.
- Trautwein, U., Schnyder, I., Niggli, A., Neumann, M., & Lüdtke, O. (2009). Chameleon effects in homework research: The homework–achievement association depends on the measures used and the level of analysis chosen. *Contemporary Educational Psychology*, 34(1), 77-88.
- Walker, T. (2017, 26 January 2017). If Elementary Schools Say No to Homework, What Takes Its Place? Blog Retrieved from <http://neatoday.org/2017/01/26/no-homework-policy/>

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Roles and responsibilities

Dr Jennifer Hanratty is research fellow for Campbell UK & Ireland, Associate Editor of the Campbell Education Coordinating Group and represents Campbell UK & Ireland on the board of Evidence Synthesis Ireland. Dr Sarah Miller is Director of the Campbell Centre for UK & Ireland and Editor and Co-Chair of the Campbell Education Coordinating Group. Dr Hanratty and Dr Miller both have substantial expertise in undertaking and managing systematic reviews and will take responsibility for supporting the team in developing their systematic review skills. Dr Brennan-Wilson has worked in primary education completing a PhD in immersion education and language development and previous roles in primary school teacher training. Dr Cockerill brings methodological expertise and extensive experience working with schools on RCTs in education. Dr Davison also has more than five years' experience managing RCTs in education, focused on younger children. Dr Roberts is a former primary school teacher and current lecturer in education, training teachers and holds a Cochrane Fellowship to develop systematic review skills. Finally Dr Winter has a background in social work and expertise on educational outcomes of primary school children in care.

Please note that this is the *recommended optimal* review team composition.

- Content: ABW, MC, JD, JR, KW
- Systematic review methods: JH, SM, JR
- Statistical analysis: JH, SM
- Information retrieval: led by JH supported by Campbell UK & Ireland Information Retrieval specialist Dr Ciara Keenan.

Funding

This review is unfunded. We intend to deliver the review within 12 months.

Potential conflicts of interest

None known

Preliminary timeframe

Note, if the protocol or review is not submitted within six months and 18 months of title registration, respectively, the review area is opened up for other authors.

- Date you plan to submit a draft protocol: 25 March 2019
- Date you plan to submit a draft review: 30 November 2019