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# Technical Appendix

## Social and emotional learning<sup>i</sup>

Moderate impact for high cost, based on extensive evidence

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### Definition

Interventions and approaches which focus on social and emotional learning (SEL) aim to improve pupils' interaction with others and self-management of emotions, as opposed to focusing directly on academic or cognitive skills and knowledge. SEL is sometimes characterised as a process for learning broader life skills, such as how to deal with oneself, others and relationships, and to be able to work in an effective manner.

SEL may focus on recognizing one's own emotions and learning how to manage those feelings. In dealing with others, SEL helps with developing sympathy and empathy, and maintaining positive relationships. SEL interventions might focus on the ways in which students work with (and alongside) their peers, teachers, family or community.

Three broad categories of interventions can be identified: 1. Universal programmes which seek to improve participation and engagement and generally take place in the classroom involving all pupils; 2. More specialised programmes which are targeted at students with either behavioural issues or behaviour and academic problems (see also Behaviour interventions); 3. School level approaches to developing a positive school ethos or improving discipline which also aim to support greater engagement in learning. Some programmes include aspects of Self-regulated learning and often include Collaborative learning approaches and techniques.

Search terms: Social and emotional learning, SEAL/SEL interventions; social skills, skills-for-life, self-esteem, empathy, emotional intelligence

### Evidence Rating

There are seven meta-analyses of evaluations of interventions, mainly undertaken in schools using pupil attainment data to assess impact, with some exploration of causes of any identified heterogeneity. All were conducted in the last 10 years. However the quality of the underlying studies

varies considerably and there are few well-controlled trials, particularly at scale. Despite this, the evidence is rated as extensive overall, because of the quantity and consistency of evidence at the meta-analytic level.

## Cost Information

Costs will vary depending on the type of approach. Universal approaches that encourage social and emotional learning throughout a school will benefit from professional development and may require new materials and resources, but overall these costs are likely to be very low. In contrast, social and emotional strategies targeted at specific individuals are more expensive: estimates from the US suggest targeted programs cost about £2,800 per child per year and involve professional counselling or psychological services. On average, the costs per child are estimated as moderate.

## References

1. Aos, S., Lieb, R., Mayfield, J., Miller, M., & Pennucci, A.  
[Benefits and costs of prevention and early intervention programs for youth](#)  
(No. 04-07, p. 3901). Olympia, WA: Washington State Institute for Public Policy.  
(2004)
2. Bavarian, N., Lewis, K. M., DuBois, D. L., Acock, A., Vuchinich, S., Silverthorn, N., ... & Flay, B. R.  
[Using Social, Emotional and Character Development to Improve Academic Outcomes: A Matched Pair, Cluster Randomized Controlled Trial in Low Income, Urban Schools](#)  
*Journal of School Health*, 83(11), 771-779  
(2013)
3. Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B.  
[The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions](#)  
*Child Development*, 82(1), 405-432  
(2011)
4. Humphrey, N., Lendrum, A., & Wigelsworth, M.  
[Social and emotional aspects of learning \(SEAL\) programme in secondary schools: national evaluation](#)  
Research Report DFE-RR049 London: DfE

(2010)

5. *Korpershoek, H., Harms, T., de Boer, H., van Kuijk, M., & Doolaard, S.*

A meta-analysis of the effects of classroom management strategies and classroom management programs on students' academic, behavioral, emotional, and motivational outcomes

Review of Educational Research, 86(3), 643-680

(2016)

6. *Manchester Institute of Education*

Promoting Alternative Thinking Strategies (PATHS) Evaluation report and Executive summary  
EEF, London

(2015)

7. *Nix, R. L., Bierman, K. L., Domitrovich, C. E., & Gill, S.*

Promoting children's social-emotional skills in preschool can enhance academic and behavioral functioning in kindergarten: Findings from Head Start REDI

Early Education & Development, 24(7), 1000-1019

(2013)

8. *Payton, J., Weissberg, R. P., Durlak, J. A., Dymnicki, A. B., Taylor, R. D., Schellinger, K. B., & Pachan, M.*

The positive impact of social and emotional learning for kindergarten to eighthgrade students.  
Chicago, IL: Collaborative for Academic, Social, and Emotional Learning (CASEL)

(2008)

## Summary of effects

Meta-analyses	Effect size	FSM effect size	
Bavarian, N., Lewis, K. M., DuBois, D. L., Acock, A., Vuchinich, S., Silverthorn, N., ... & Flay, B. R. (2013)		0.42	
Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011)	0.27	-	
Korpershoek, H., Harms, T., de Boer, H., van Kuijk, M., & Doolaard, S. (2016)	0.17	-	
Payton, J., Weissberg, R. P., Durlak, J. A., Dymnicki, A. B., Taylor, R. D., Schellinger, K. B., & Pachan, M. (2008)	0.28	-	
Single Studies			
Manchester Institute of Education (2015)	-0.03	0.03	Maths
Nix, R. L., Bierman, K. L., Domitrovich, C. E., & Gill, S. (2013)	0.16	-	
	<b>0.28</b>		

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## Meta-analyses abstracts

### 3

Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011)

This article presents findings from a meta-analysis of 213 school-based, universal social and emotional learning (SEL) programs involving 270,034 kindergarten through high school students. Compared to controls, SEL participants demonstrated significantly improved social and emotional skills, attitudes, behaviour, and academic performance that reflected an 11-percentile-point gain in achievement. School teaching staff successfully conducted SEL programs. The use of 4 recommended practices for developing skills and the presence of implementation problems moderated program outcomes. The findings add to the growing empirical evidence regarding the positive impact of SEL programs. Policy makers, educators, and the public can contribute to healthy development of children by supporting the incorporation of evidence-based SEL programming into standard educational practice.

### 5


Korpershoek, H., Harms, T., de Boer, H., van Kuijk, M., & Doolaard, S. (2016)

This meta-analysis examined which classroom management strategies and programs enhanced students' academic, behavioral, social-emotional, and motivational outcomes in primary education. The analysis included 54 random and nonrandom controlled intervention studies published in the past decade (2003–2013). Results showed small but significant effects (average  $g = 0.22$ ) on all outcomes, except for motivational outcomes. Programs were coded for the presence/absence of four categories of strategies: focusing on the teacher, on student behavior, on students' social-emotional development, and on teacher–student relationships. Focusing on the students' social-emotional development appeared to have the largest contribution to the interventions' effectiveness, in particular on the social-emotional outcomes. Moreover, we found a tentative result that students' academic outcomes benefitted from teacher-focused programs.

### 8

Payton, J., Weissberg, R. P., Durlak, J. A., Dymnicki, A. B., Taylor, R. D., Schellinger, K. B., & Pachan, M. (2008)

This report summarizes results from three large-scale reviews of research on the impact of social and emotional learning (SEL) programs on elementary and middle-school students — that is, programs that seek to promote various social and emotional skills. Collectively the three reviews included 317



studies and involved 324,303 children. SEL programs yielded multiple benefits in each review and were effective in both school and after-school settings and for students with and without behavioral and emotional problems. They were also effective across the K-8 grade range and for racially and ethnically diverse students from urban, rural, and suburban settings. SEL programs improved students' social-emotional skills, attitudes about self and others, connection to school, positive social behavior, and academic performance; they also reduced students' conduct problems and emotional distress. Comparing results from these reviews to findings obtained in reviews of interventions by other research teams suggests that SEL programs are among the most successful youth development programs offered to school-age youth. Furthermore, school staff (e.g., teachers, student support staff) carried out SEL programs effectively, indicating that they can be incorporated into routine educational practice. In addition, SEL programming improved students' academic performance by 11 to 17 percentile points.