RLC Research Review:
Social-Emotional Learning (Maths Focus)

Context – Looked After Children:

According to c. 41 of the Children Act 1989, Looked After Children (LAC) are children that have been in the care of a local authority and provided with accommodations for a continuous period of more than 24 hours. A child up is eligible for the LAC designation until they turn 18, return home, or are adopted (National Society for the Prevention of Cruelty to Children [NSPCC], 2021). The education of LAC in England is supported through key legislation and policy:

- The Children and Young Persons Act 2008, which amends aspects of the Children Act 1989 and reforms the care system of LAC,
- The Children and Families Act 2014, which specifies that local authorities must appoint at least one person to support the educational achievement of LAC, and
- Statutory guidance from the DfE (2021a), such as how to promote the emotional and behavioural development of LAC.

As of 31 March 2020, there were 80,080 LAC in England, representing nearly 1 in every 100 pupils attending school (DfE, 2021). While already a striking number, it has been growing year over year since 2008, increasing by over 15% since 2015. The majority of these children are placed in the care of their local authority due to abuse or neglect (63%), while the remaining are placed into care due to family dysfunction (14%), family in acute distress (8%), absent parenting (7%), child's disability (3%), parent's illness (3%), or other issues (2%) (DfE, 2021).

About 10% of LAC move between three or more placements each year, putting them at significant risk regarding their well-being and positive behavioural outcomes. Moreover, a large and growing body of evidence suggests that LAC may suffer from established behaviour patterns developed throughout early childhood that negatively impact their ability to thrive in typical educational settings without specific attention to their social-emotional and academic development. At the same time, LAC are far from a homogenous group of children. They vary by age (ranging from under 1 year up to 18 years), ethnicity, gender, reasons for being looked after, placements (e.g., foster placement, living independently), legal status (e.g., care order, voluntary agreement), locality of placement, and support needs.

The DfE's (2021) most recent data from 2019 on outcomes for LAC finds the following:
- four times more likely to have a special educational need;
- nine times more likely to have an education, health, and care plan;
- lower educational attainment non-looked after children at
  - key stage 1 in reading, writing, and mathematics, and science (26 percent fewer reached the expected standard);
  - key stage 2 in reading, writing, and mathematics (28 percent fewer reached the expected standard), though this outcome appears closely related to the prevalence of pupils with a special education need;
  - key stage 4 in the average Attainment 8 score (44.6 versus 19.1), percentage of pupils achieving grade 5 or above in English and mathematics (40.1 versus 7.2), and English baccalaureate average point score (3.87 versus 1.52).

In general, LAC are more likely than non-looked after children to have mental health issues, additional or special education needs, and lower educational attainment. Finally, after leaving care, they are also less likely to be in education, training, or employment (NSPCC, 2021). See the sources below for more in-depth examinations of the complex and multi-faceted circumstances and outcomes LAC face.

Department for Education. (2021). *Statistics: Looked-after children*.
https://www.gov.uk/government/collections/statistics-looked-after-children
National Society for the Prevention of Cruelty to Children. (2021, August 6). *Statistics: Looked-after children*.
https://www.gov.uk/government/collections/statistics-looked-after-children

Oakley, M., Miscampbell, G., & Gregorian, R. (2018). *Looked-after children: The silent crisis*. Social Market Foundation.

Sebba, J., Berridge, D., Luke, N., Fletcher, J., Bell, K., Strand, S., Thomas, S., Sinclair, I., & O'Higgins, A. (2015). *The educational progress of looked after children in England: Linking care and educational data*. Rees Centre, University of Bristol.

Title:

Key text:

van Poortvliet, M., Clarke, A., & Gross, J. (2019). *Improving social and emotional learning in primary schools: Guidance report*. Education Endowment Foundation.
https://educationendowmentfoundation.org.uk/education-evidence/guidance-reports/primary-sel

Other reading:

Education Endowment Foundation SEL Case Studies:
https://educationendowmentfoundation.org.uk/news/eef-blog-new-eef-case-studies-social-and-emotional-learning-sel

Wigelsworth, M., Verity, L., Mason, C., Humphrey, N., Qualter, P., & Troncoso, P. (2020a). *Identifying effective, evidence-based social and emotional learning strategies for teachers and schools: Evidence review*. Education Endowment Foundation.
https://educationendowmentfoundation.org.uk/education-evidence/evidence-reviews/social-and-emotional-learning

Wigelsworth, M., Eccles, A., Mason, C., Verity, L., Troncoso, P., Qualter, P., & Humphrey, N. (2020b). *Programmes to practices: Results from a social & emotional school survey*. Education Endowment Foundation.
https://educationendowmentfoundation.org.uk/education-evidence/evidence-reviews/social-and-emotional-learning

Method:

The recent guidance report on social and emotional learning from the Education Endowment Foundation (EEF) combines an evidence review of SEL strategies or practices that teachers can integrate into their everyday teaching (see Wigelsworth et al., 2020a) with a survey of what primary schools in England are currently doing to support children's social and emotional development (see Wigelsworth et al., 2020b). For the former Wigelsworth (2020a) conducted a "review of reviews" to synthesize insights from the current evidence base containing many systematic reviews and meta-analyses. In total, following a rigorous screening of the available literature, the authors identified 33 reviews published between 2000-2018 that shed light on SEL theory and practice in three areas:

    a) classroom activities;

    b) school-level processes and practices; and

    c) differential gains produced through (a) and (b) among different population subgroups (e.g., children from disadvantaged backgrounds).

To complement the findings from their review, Wigelsworth et al. (2020a) then examined 251 primary studies (from the reviews, expert consultations, guides, and grey literature) that evaluated school-based SEL programmes within the past 20 years. A total of 13 programmes were identified, of which the most recent randomized-control trial evidence was found and incorporated to detect common effective practices.

For the Wigelsworth et al. (2020b) study, the authors present the results of a survey administered in March 2019 and completed by 621 primary schools in England about how SEL is viewed and implemented. The majority of respondents were deputy heads (48%), special education needs coordinators (25%), and head teachers (10%), with the remaining portion made up of other school staff.

The literature review below is further informed by (a) individual journals (all peer reviewed) primarily in the area of education, (b) relevant evaluation reports commissioned by the EEF, and (c) grey literature sources that evidenced a clear connection with the research literature and which contributed to current debates and understandings. Additionally, sources were selected to illustrate a range of aspects of the
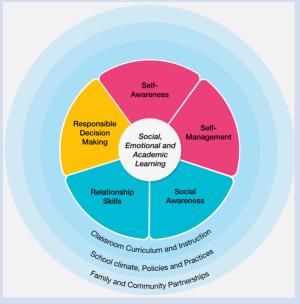
theory and a range of research methodologies from international contexts. All incorporated sources were published within the last ten years.

Overview of the Issue or Subject:

Social and emotional learning (SEL) concerns the processes through which children develop their social, emotional, and behavioural skills. More specifically, the Collaborative for Academic, Social and Emotional Learning (CASEL) provides one of the most referenced definitions of SEL: "The process through which children and adults acquire and effectively apply the knowledge, attitudes, and skills necessary to understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions" (see https://casel.org/). Their model, shown below, highlights five core competencies at the heart of SEL: self-awareness, self-management, social awareness, relationship skills, and responsible decision making. Building these competencies has the potential not only to result in positive school outcomes such as improved behaviour, but also long-term positive outcomes that can follow into pupils' adult lives such as positive mental health and reduced criminal behaviour.

Several elements underly CASEL's model and bear consideration in any intervention designed to promote SEL. First, efforts to build pupils' social and emotional skills (see Table below) are not restricted to specific subject areas or key stages in the curriculum. Schools have a central role in promoting SEL skills, but they develop all throughout the life course. Hence, interventions that bridge school, family, and community contexts potentially provide the greatest long-term benefits. Second, SEL benefits all pupils, and, where some pupils might benefit from more intensive SEL provisions, universal interventions can be complemented with more targeted approaches (e.g., cognitive behavioural therapy). Third, regarding the SEL core competencies and associated skills, schools have significant latitude in deciding where to place their focus, as the empirical literature offers little guidance in terms of areas to give primacy.

Source: van Poortvliet et al. (2019, p. 4)

Core competency	Definition	Associated skills
Self-awareness	The ability to accurately recognise one's own emotions, thoughts and values and how they influence behaviour. The ability to accurately assess one's strengths and limitations with a well-grounded sense of confidence and optimism.	• Identifying emotions • Accurate self-perception • Recognising strengths • Self-confidence • Self-efficacy
Self-management	The ability to successfully regulate one's emotions, thoughts and behaviours in different situations – effectively managing stress, controlling impulses, and motivating oneself. The ability to set and work towards personal and academic goals.	• Impulse control • Stress management • Self-discipline • Self-motivation • Goal setting • Organisational skills
Social awareness	The ability to take the perspective of and empathise with others. The ability to understand social and ethical norms for behaviour and to recognise family, school and community resources and supports.	• Understanding emotions • Empathy/sympathy • Appreciating diversity • Respect for others
Relationship skills	The ability to establish and maintain healthy relationships with diverse individuals and groups. The ability to communicate clearly, listen well, cooperate with others, resist inappropriate social pressure, negotiate conflict constructively and seek and offer help when needed.	• Communication • Social engagement • Relationship building • Teamwork
Responsible decision making	The ability to make constructive choices about personal behaviour and social interactions. The realistic evaluation of consequences of various actions and a consideration of the wellbeing of oneself and others.	• Identifying problems • Analysing solutions • Solving problems • Evaluating • Reflecting • Ethical responsibility

Source: van Poortvliet et al. (2019, p. 4)

As outlined in the EEF's guidance report, SEL interventions will tend to work at three levels: whole-school, whole-class, and targeted. The latter is beyond the scope of this research review but can be nonetheless critical for pupils who require more intensive support. Wigelsworth et al. (2020a) offers the follow key summaries for whole-school and whole-class interventions as well as how they may produce differential gains among different population subgroups.

Whole-School Interventions
Multi-component elements of SEL are theorised to be an integral element of effective, long term SEL implementation. Such is the case of parental and community engagement, 'promoting a shared vision' through whole school activities, and/or teacher training. There is mixed evidence as to the effectiveness of multi component elements. As empirical data is lacking, the specifics about how such elements can be effective are not well known. (see p. 37)

Whole-Class Interventions (i.e., classroom, curriculum, and instruction)
SEL curriculum provision is generally seen as effective and there is an agreement about what broadly constitutes a curriculum package. However, individual packages can significantly differ in relation to their focus and aim, with implications for how and to what extent CASEL's 5 core domains (and their related subdomains) are delivered. There is more to understand about how CASEL's 5 core competencies relate to one another. (see p. 39)

Differential Gains

Although SEL programming has been seen to be successfully delivered across a diverse range of contexts . . . there is little consensus as to the empirical findings regarding differential impact on identified subgroups (low income, ethnic minority status, SEN, and or 'at risk' status for mental health difficulties). The complex interrelations between these factors and the wider ecology (e.g. context for delivery) means there is limited evidence available to help meet the needs of different subgroups.

Recommendations Aligned with Each of the Core Competencies

In addition to the empirical findings about SEL interventions in general, Wigelsworth et al. (2020a) also offer the research summaries integrated below for each of the five core competencies and their associated skills. These summaries concentrate on the instructional practices and elements supported by the available empirical evidence.

Self-Awareness

Across the expansive literature, two skills are most commonly addressed concerning how pupils develop their self-awareness: identifying emotions and accurate self-perception. Few studies, by contrast, have examined recognising strengths, self-confidence, or self-efficacy. Identify emotions: "structured examples can be provided by teachers (and accompanying stimulus materials) for students to recognise the context behind their own emotional states. Building on this, a key focus is on expanding children's own explicit emotional vocabulary, both through explicit practice as well as integrated into the wider academic curriculum (e.g. feelings-based spelling test)" (p. 50). Accurate self-perception: "Alongside developing an expanded *emotional vocabulary*, teachers can pursue *self-reflective questioning* with children in order form them to evaluate their self-perceptions. This can be done with existing stimulus material and/or and facilitated through discussion (e.g. circle time) dependent on the age of the children" (p. 51).

Self-Management

Within the self-management core competency, studies are not well distinguished in their focus on impulse control and self-discipline. Although CASEL's model presents these associated skills as separate, the empirical support for this conceptual distinction is limited. There is also limited SEL research that addresses the self-motivation, goal setting, and organizational skills. As a result, Wigelsworth et al. (2020a) merged the research findings for impulse control and self-discipline and concluded the following: "Within this domain kinaesthetic activities utilise *calming techniques* to manage behaviour and control behavioural impulses (e.g. tantrums and angry outbursts). The activities are aimed at relaxation and re-focusing thoughts that may lead to negative response, enabling children to be more aware of their bodies and recognising the onset of feelings and emotions before they become too intense. Many of the activities utilise proprioception, for example, meditation and mindfulness activities, and encourage children to be aware of their actions and responses so that they match both classroom and personal behavioural goals." (p. 52).

Social Awareness

Studies of the social awareness core competency concentrate on the understanding emotions and empathy/sympathy skills. Comparatively limited strong research evidence is available to inform school- or class-level interventions for the appreciating diversity and respect for others skills. Understanding emotions (described as perspective taking): In many studies of this skills area, pupils are provided with scenarios to examine in the form of stories or vignettes. Subsequently, "they were then asked, 'what would you do?/how would you feel?' questions. The common purpose across these activities was to promote *self-reflective questioning*; a metacognitive technique that allows children to *see the perspectives of others* and understand the emotions others may feel by visualizing themselves in that circumstance. This sets a self-reflective mental framework when rationalising the actions of others. The use of stories and vignettes allow the child to be cognizant of situations and circumstances they may not have experienced (e.g. being left out of a game), allowing the children to see the perspective of the protagonist and the reasons for their actions." (p. 52). The degree of teacher involvement in the literature

appeared to vary by pupils' age. Whereas younger pupils seemed to benefit from more question-and-answer based worksheets facilitated by a teacher, older pupils benefitted from more comprehensive, independent worksheets complemented by open-ended discussion-based questions. Additionally, with increasing age, the evidence suggests pupils should have opportunities to review and consider conflicts of perspectives and emotions. It should be noted, however, that few studies have examined the interaction between children's perspectives and feelings when developing their understanding of emotions. Empathy: "There was a recognised need to consider different forms of empathy, necessitating different approaches. Cognitive forms of empathy were supported through *increased emotional vocabulary*, whereas affective forms of empathy required *self-reflective questioning* and *role-play techniques*" (p. 54).

Relationship Skills
Studies that investigate the development of pupils' relationship skills focus primarily on relationship building and communication. Consequently, less concrete guidance is available regarding social engagement and teamwork. Communication: "Communication skills are developed through helping children recognise *communication barriers*. This is done though sharing examples (e.g. use of stories) but also through the explicit teaching and *modelling of schemas* – rules and protocol for initiating conversation and sharing thoughts and feelings. This can be done through modelling and role play techniques. Examples include learning how to join in a game or conversation (by noting attention and for the other party to recognise that you have something to say) and/or expressing difficulties to be resolved (e.g. 'earlier you ignored me on the playground, and I feel upset by this')." (p. 55). Relationship building: "Relationships skills are built through introducing pupils to different scenarios (written, modelled or through reflective questions) in order to *develop schemas* around appropriate responses. This was supported through 'ad hoc' or teachable moments in the school day where these schemas could be practiced in 'real world' situations" (p. 56).

Responsible Decision Making
Studies about the fifth core competency of SEL, responsible decision making, tend to focus on the skills of identifying, analysing, and solving problems. Empirical research is comparatively limited on evaluating, reflecting, and ethical responsibility. Identifying problems: The main practice associated with promoting pupils' ability to rationalize problems autonomously are the provision of problem scenarios and teacher-led questioning. Both practices should focus on helping pupils identify the antecedents of a problem scenario (e.g., the decisions a protagonist made to reach a problem state). Analysing and solving problems: "The principle practices of the activity are to model appropriate responses to problems. Bad choices and the consequences are also dramatized. Children are not explicitly told how to solve the conflict but are encouraged to reach a solution to the conflict themselves by *exploring choices and their consequences*. Different stages to problem solving strategy were provided. Recognizing problems and their severity is the first stage of the process. This is followed by highlighting appropriate/inappropriate methods of communicating problems (e.g. interrupting an adult and shouting out a small problem is inappropriate, whereas expressing urgency and interrupting an adult for a big problem is necessary). Problem solving skills are consistently *modelled*; however, the principle aim is to *allow children to choose solutions to their own problems*, i.e. going through the steps of exploring choice and consequence" (p. 56).

The Overall Strength of the Research Evidence
Overall, there is a wealth of evidence in support of SEL interventions to improve pupils' attainment and well-being. However, the EEF's Teaching and Learning Toolkit suggests that observed outcomes may depend on several factors:
- secondary age pupils may realize greater benefits from SEL than primary age pupils;
- literacy outcomes may be greater than in other subject areas, such as mathematics;
- interventions that focus on social interaction may produce greater benefits than those focused on personal and academic outcomes or preventing problematic behaviour; and
- shorter (about 30-minute) sessions that occur frequently (4-5 times per week) may be preferable over other approaches.

Options or Questions Regarding Key Issues and Debates:

The EEF's audit and discussion tool for improving SEL in primary schools offers a helpful starting point regarding questions to give consideration when planning interventions.

Leadership Self-Audit
- What do we want our SEL provision to achieve?
- What relative importance do we as a school place on SEL? How do we communicate this through our vision, values and practice?
- To what extent do we model and live the values underpinning our SEL approach as the adults in the organisation? Where is this strong or less strong? How can we develop this further?

Curriculum Self-Audit
- How are we ensuring a basic entitlement to social and emotional learning for all children in all classes over time?
- To what extent do we understand the progression and cycle of SEL learning through the school?
- How are teachers making decisions about what to teach, and when?

Everyday Teaching Self-Audit
- Where do staff use everyday situations well to teach SEL skills? Who is great at it and what can we learn from them?
- How do we balance the needs of the academic curriculum with being able to respond to situations as they arise? How are we supporting and empowering teachers to use their professional judgement in this area?
- To what extent are all staff able to manage their own emotions in order to provide learning within crisis moments?

Whole-School Ethos and Activities Self-Audit
- To what extent do we have a shared language for SEL learning?
- How does this connect with our behaviour and anti-bullying policies?
- How do we ensure that referring to SEL is a normal part of many routines and practices? How can we make it the easy and automatic thing to do?
- To what extent are we clear that SEL is something we need to learn and that, just like every subject, there are things we all find easier and harder?

Potential Implementation Issues to Consider:

Despite the growing emphasis on SEL in all disciplines, there remains many gaps in the current evidence base. One of the most conspicuous of these gaps is the relatively limited empirical support that CASEL's five core competencies actually fit together as a single model to represent SEL. Partly this issue stems from the morass of concepts related to SEL. Many concepts are used synonymously with each of the CASEL's core competencies (e.g., emotional self-awareness conflated with emotional literacy); some core competencies are used in multiple and conceptually distinct ways in the literature; and some concepts representing the outcomes of SEL are used interchangeably, confusing the ability to draw overarching insights from the empirical research. As a result, schools need to exercise caution when implementing SEL interventions, ensuring common understanding of definitions for both core competencies and desired outcomes.

Another gap in the literature concerns the extent to which research findings from one context travel to other contexts. Most of the research on SEL derives from the United States. As such, beyond obvious differences such as administrative levels (e.g., federal, state, district), the applicability of intervention efforts in an English context remain uncertain to some degree.

There is also little known about the long-term impacts of SEL interventions, with research from Michael Wigelsworth finding that fewer than 8% of primary studies follow up beyond 18 months. Relatedly, there is limited evidence that draws a causal connection between school-based interventions and long-term positive outcomes. While there is strong association-based evidence, further research is needed to determine the nature of the relationship between SEL outcomes and other desirable outcomes. For instance, while there is ample evidence that SEL interventions are associated with higher educational attainment, it is not clear whether stronger social-emotional skills promote higher levels of attainment, whether it is the reverse association that holds true, or whether these outcomes are mutually reinforcing.