K4D | Knowledge, evidence and learning for development

The Connection Between Socio-Emotional Learning and Girls' Educational Outcomes

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Questions

1. How have socio-emotional skills been integrated into the curricula at different levels of education?
2. What evidence is there for the connection between socio-emotional learning and girls' educational outcomes?

Contents

1. Summary

The literature on socio-emotional learning is vast, with a broad range of programmes and interventions spanning multiples ages with a variety of different objectives. A USAID systematic literature review of SEL interventions, identified a broad range of outcomes identified in evaluations of SEL programmes, including: social/emotional, academic, well-being, workforce, teacher and school & community outcomes (Deitz et al., 2021, p. 36). The majority of the literature on academic outcomes is drawn from high-income contexts, predominantly the US (Mahoney et al, 2018), though a small number of studies looking at the impact of girls' clubs have sought to make a connection between participation in clubs and academic performance (Marcus et al, 2017; Amenya et al, 2021).

Interventions targeting Early Years typically focus on play-based interventions at home and in primary care settings, and on parenting and prenatal skills development and support (Sánchez Puerta et al., 2016). The outcomes of these interventions typically focus on the development of socio-emotional learning skills, parenting behaviours, but also on academic performance (ibid). A World Bank review found that interventions before school were more likely to show favourable results during follow-up, predominantly due to greater opportunities for data collection amongst younger participants and their parents (ibid).

In school interventions can be categorized into three broad approaches (EEF, 2022):

1. School-level approaches to developing a positive school ethos, which also aims to support greater engagement in learning;
2. Universal programmes which generally take place in classrooms with the whole class
3. More specialised programmes which use elements of SEL and are targeted at students with particular social and emotional needs.

School-based programmes have been associated with academic learning gains by a multitude of large-scale global meta-analyses, predominantly drawing data from high-income settings (Durlak et al., 2011; EEF, 2022; Mahoney et al., 2018; Sklad et al., 2012, 2012; Taylor et al., 2017). The EEF (2022) distilled some key learning in the types of school-based interventions that are most likely to be associated with positive academic performance:

- Interventions for secondary age pupils were typically found to be more effective in improving learning outcomes in literacy and mathematics compared to primary (+5 months gains at secondary compared to +4 months gains at primary)
- Interventions with a focus on improving social interaction tended to be associated with the greatest gains (+6 months), followed by those aimed at preventing problematic behaviour (+5 months) and those focusing on personal and academic outcomes (+5 months)
- Shorter and more frequent sessions focused on the development of SEL were the most successful structure (30 minute sessions 4-5 times per week)

Aside from the direct academic outcomes, SEL is found to have intermediate outcomes too, particularly in lower-income contexts. For example, girls' clubs are associated with increased enrolment and retention rates at multiple levels of education (Marcus et al, 2017), in addition to increasing girls' self-esteem and motivation to learn (Amenya et al, 2021). Other programmes with a focus on SEL have been found to improve career-related outcomes, delay pregnancy and

early marriage, and support the development of skills required by the workplace, or advancing prosocial/anti-conflict behaviours (Sánchez Puerta et al., 2016).

2. Defining socio-emotional and foundational learning skills

Socio-emotional learning (SEL)

Socio-emotional learning (SEL) refers to the acquisition of a broad range of skills, that can have broad interpretation. Green and Garcia-Millan (2021, p. 14) adopt the following definition:

> "Social and Emotional Learning (SEL) is the process through which all children and adults acquire and apply the knowledge, skills, and attitudes to develop healthy identities, manage emotions and achieve personal and collective goals, feel and show empathy for others, establish and maintain supportive relationships, and make responsible and caring decisions."

There are five components to socio-emotional learning that are frequently referred to throughout the literature (Green and Garcia-Millan, 2021, pp.14-15):

- **"Self-awareness**: the abilities to understand one's own emotions, thoughts and values and how they influence behaviour across contexts
- **Self-management**: the abilities to manage one's emotions, thoughts, and behaviours effectively in different situations and to achieve goals and aspirations
- **Social awareness**: the abilities to understand the perspectives of and empathise with others, including those from diverse backgrounds, cultures and contexts
- **Relationship skills**: the abilities to establish and maintain healthy and supportive relationships and to effectively navigate settings with diverse individuals and groups
- **Responsible decision making**: the abilities to make caring and constructive choices about personal behaviour and social interactions across diverse situations"

Foundational learning skills

Foundational learning refers to the "basic literacy, numeracy and transferable skills that are the building blocks for a life of learning" (Herbert et al., 2021). The RISE programme identifies basic understanding of reading and mathematics as constituting foundational skills (RISE programme, 2022). RISE outline the following aspects needed to achieve foundational learning skills (Ibid):

- "Universal: **Every** child in the world should achieve foundational learning
- Early: Children need to start learning **early**, because those who fall behind rarely catch up
- Conceptual: Foundational learning must include more than rote learning. Children must be able to make sense of the world and **understand concepts** behind solving problems
- Procedural: In addition to understanding concepts, children need practice and fluency in procedures. They must learn how to do **the steps to solve problems** and apply skills practically

- Mastery: Children should achieve some agreed-upon **level of proficiency** and difficulty against which progress can be measured
- Foundational skills: **Basic literacy and numeracy** are vital, indispensable skills needed for virtually any further education and to lead an empowered, self-determined life."

The programme highlights that children need to learn to read so they can read to learn. Basic proficiency in reading is therefore the foundation to engage in other future learning activities across a broad range of subject areas.

3. Learning on SEL from girls' clubs

Girls' clubs have become common features of both school and community-based programmes that aim to improve the wellbeing, life skills and empowerment of girls. The design and activities of clubs varies widely but are often part of multi-component programmes and include a life skills curriculum, content on gender equality, health and may include financial literacy or vocational training (Page, 2020).

A recent systematic review published by the Campbell Collaboration on policies and interventions to remove gender-related barriers to girls' participation in school and learning included 15 studies of life skills education interventions. The review found that although life skills programmes were effective in some contexts, mixed results and the use of indirect measures lead to a low confidence in the available evidence (Psaki et al, 2022). Only two of the included studies measured the impact of life skills on academic or cognitive outcomes (Ashraf et al, 2018 and Mensch et al, 2019) and both found no significant positive effect (Psaki et al, 2022).

Previous reviews of the impact of girls include a rigorous review and gap map produced by the Gender & Adolescence Global Evidence (GAGE) research programme. This review looked at the available evidence of the impact of girls' clubs and life skills programmes on a range of girls' wellbeing outcomes (Marcus et al, 2017). The review included 37 studies which reported from a range of SEL outcomes – including self-esteem and self-confidence, aspirations, self-efficacy and decision making and leadership skills. For example, evaluations of six programmes – three school based and three community based – recorded impacts on girls aspirations, evaluation of TEGINT clubs in Tanzania found the proportion of girls who wanted a profession almost doubled from 41% in 2008 to 76% in 2012 (Mascarenhas, 2012) while participants in the CHATS programme in Malawi showed a significantly stronger understanding of future career opportunities and educational pathways after one year of the programme (Sidle et al, 2015).

The review found a smaller number of studies that linked participation in clubs with positive impacts on access to education. Nine programmes were reported to lead to positive changes in educational achievement while six lead to mixed changes, for instance improvements in only some age groups or in some subjects for instance. The multi-faceted nature of the programmes makes it difficult to isolate the impact of SEL components of programme. One example of a positive impact was the BALIKA programme in Bangladesh were girls followed a life and livelihood skills curricula with a locally recruited mentor, girls who completed the training were 20% more likely to have improved their mathematics skills (Amin et al, 2016).

A recent K4D review on lessons learned from the outcomes and delivery of girls' cubs also highlights a number of relevant programmes

- Improving Girls' Access through transforming education (IGATE) Zimbabwe found that girls' who were members of a Power Within Club were more likely to score highly in literacy and numeracy at the programme midline and endline (Miske Witt & Associates, 2017).
- The Tiphunzire project in Malawi delivered clubs targeted to marginalised girls at risk of dropout and aimed to improve literacy, numeracy, life skills, empowerment and confidence. Girls who participated reported improved school attendance and small improvements in EGRA and EGMA (Navarrete et al, 2015).

Key overarching considerations for effective programming include developing multifaceted programmes to address multiple barriers to education, careful consideration and training of facilitators, curricula designed with the local context in mins and the value of longer term follow up (Page, 2020).

4. SEL interventions and curricula

The literature on socio-emotional learning is vast. The exact approach to SEL has many dependencies, including local context, age of students, desired programme outcomes, whether the target beneficiaries are whole classes/schools or specific target groups, and system capacity to integrate into school settings or be offered through independent providers. Although the broad principles of SEL are the same across interventions (as per the definition above), the way this is interpreted and applied varies considerable throughout the literature base. The below sections provide an overview of SEL interventions by stage of education, and those provided outside of school.

SEL in for Early Years and lower primary

SEL interventions in Early Years (ages 0-5) typically take place in Early Years care settings (i.e., preschools and nurseries), or at home with caregivers. Some interventions target both caregivers and children in care settings. A World Bank review of SEL interventions globally identified Early Years interventions (or "before-school programmes as they are referred to in the report) as being the stage with the most positive longer-term results (Sánchez Puerta et al., 2016). The review found that Early Years interventions where children planned, carried out and reviewed their own activities through active learning were the most successful in developing SEL, or where teachers responded to children's self-initiated play in a socially supportive setting (ibid). The below table outlines the types of interventions reviewed in the study (Table 1).

Table 1: summary of before-school interventions to develop SEL

Programme-type	Target beneficiaries	Summary of types of interventions
Before school programmes - Home visiting programmes	Children aged 0-4, typically from vulnerable households or living in a specific	• Weekly sessions with social workers and psychologists • Parental education on parenting techniques and interacting with children through play

Programme-type	Target beneficiaries	Summary of types of interventions
	location and their parents (mostly mothers)	(i.e., through play demonstrations and modelling) • Prenatal support to mothers • Connecting parents with resources
Before school programmes - Child-care centers	Children aged 0-6 (dependent on country and age of starting school), typically students from vulnerable households/communities and mothers	• Quality assurance of early childhood education • Stipends/scholarships for attending early childhood settings • Mindfulness for young children • Teaching children about health, nutrition, risks and early education • Health education for mothers • Curriculum for early years through delivery of SEL lessons on topics such as advanced feelings, self-control strategies and problem solving

Source: Sánchez Puerta et al., 2016 reproduced under CC BY 3.0 IGO

Play is one of the most frequently cited approaches to developing young children's socio-emotional skills before joining school, and in the early years of primary education. Solis et al (2020, p. 11) in their report for the Lego Foundation identified that children are engaged in learning through play when the activity is:

1. "Experienced as joyful
2. Helps children find meaning in what they are doing or learning
3. Involved active, engaged, minds-on thinking
4. Involves iterative thinking (e.g., experimentation, hypothesis testing)
5. Involves social interaction"

The review explored the different approaches to embedding play within Early Years curriculums globally. The authors identified that teacher development in design and delivery of interventions is an important component in ensuring reforms are both successful and sustainable (ibid, p. 9). Some countries, such as South Korea and South Africa, integrated play-based activities through extra-curricular activities rather than integrating into subjects. Other countries however opted for a more integrated approach, using play to help children learn core content in subjects of the curriculum, in addition to developing social and emotional skills (Australia and Finland) (ibid, p. 9).

SEL in-school primary and secondary

Multiple interventions cut across primary and secondary education, or adopt similar approaches, making it difficult to present these sections separately. The Education Endowment Foundation

(EEF) provide synthesised evaluative evidence of SEL interventions at primary and secondary level. They identified three broad categories of SEL interventions (EEF, 2022):

4. School-level approaches to developing a positive school ethos, which also aims to support greater engagement in learning;
5. Universal programmes which generally take place in classrooms with the whole class
6. More specialised programmes which use elements of SEL and are targeted at students with particular social and emotional needs.

The third of these approaches will be described in more detail in the below section.

In the previously mentioned World Bank study, of the 34 school-based interventions, 28 involved teacher training, 32 involved integrating SEL into the class curriculum or teaching as its own subject, 13 involved household level interventions (i.e., with parents) and 5 were extracurricular activities (i.e., after school clubs). The below table summarises the types of programmes reviewed based on the above categories.

Table 2: summary of in-school interventions to develop SEL

Programme-type	Target beneficiaries	Summary of types of interventions
School-based programmes	Primary school aged-children and parents	• 4Rs programme – intervention in literacy development, conflict resolution, and intergroup understanding • Teacher training • Integration of SEL into subject curricula (morality, problem solving, cognitive processes etc.) • Standalone SEL curricula for lessons to be delivered in school (following rules, emotional literacy and empathy, interpersonal problem solving, social skills, communication skills) • School-wide activities that encourage cooperative working and creating caring classroom communities • Parental education • Drama and/or puppets • Self-regulation whilst teaching literacy and numeracy
	Secondary school	• Teacher training on conflict resolution • Whole-school approaches designed to foster collaborative and creative school atmospheres • Exposure to prosocial adults/role models

Programme-type	Target beneficiaries	Summary of types of interventions
		• Lessons on SEL components taught in school by teachers • Cognitive behavioural therapy • Community service/volunteering • After-school clubs (e.g., life skills games focussed on leadership skills, confidence and self-awareness) • Sexual and reproductive health

Source: Sánchez Puerta et al., 2016 reproduced under CC BY 3.0 IGO

The literature is not clear on whether the best approach involves integrating SEL into core subjects in the curriculum, teaching SEL as a standalone subject, or whether it should be treated as an extra-curricular out of school activity. The evidence for SEL linking to academic outcomes (explored section 4 below), presents data for integrated approaches, and does not compare between types of intervention.

SEL interventions targeting vulnerable groups in and out of school

The third broad range of SEL activities are more-targeted approaches for groups both in and out of school. A well-known approach is girls' clubs, that often take place within schools and in the wider community (Marcus et al., 2017). Girls' clubs often have a focus on developing technical skills or academic attainment, in addition to life skills, which typically focus on changing gender norms, communication skills and sexual and reproductive health (ibid).

Another approach is to target learners who are vulnerable due to past trauma, such as fleeing conflict. A UNESCO GEM report explored the potential of social-emotional learning on improving learning and social outcomes for students who have experienced trauma, particularly those experiencing trauma as a result of displacement. They identified five areas where social-emotional learning can be embedded in the curriculum, or feature through extra-curricular activities. The below table outlines key findings from the report.

Table 3: approaches to social and emotional learning in the curriculum and through extra-curricula activities

Intervention type	Description	Examples
Creative expression	Development of SEL through art, music or drama, including child-centered play	Montreal Canada programme focused on immigrant and refugee primary school students. Involved creative arts workshops with verbal and non-verbal expressions, offered in primary schools in 2-hour sessions once a week for 12 weeks, led by an art therapist, a psychologist and a teacher. Another

Intervention type	Description	Examples
	therapy, role-playing and grief-focused art	intervention in Montreal involved a 10-week series of drama workshops. The Maya Foundation in Turkey, with guidance from the Ministry of Education, has operated a trauma-informed schools project since 2016 in selected primary schools and temporary education centres for refugee learners. The SEL involves an 8-week long art therapy workshop.
Executive function activities	Target cognitive processes the coordinate thought, memory, emotions and motor movement.	The Education in Emergencies, Evidence for Action initiative of the International Rescue Committee implemented low-intensity executive function games in out-of-school tutoring programmes for internally displaced and refugee children in different countries. They were facilitated by teachers during 10-minute breaks in between literacy and numeracy lessons.
Mind-body activities	Meditation, breathing exercises, managing stress improving focus and regulating emotions.	The Better Learning Programme administered in Jordan and Palestine by the Norwegian Refugee Council is a complex set of interventions that includes mindfulness, aimed at establishing a sense of safety among students, promoting calming and self-regulation, increasing community and self-efficacy (how to find, give and receive support), and inculcating a sense of mastery and hope.
Social support-building activities	Excursions and sport programmes	A youth football project implemented in Za'atari refugee camp, Jordan, engaged about 3,000 Syrian boys and girls, and trained coaches in ways to encourage children's development and raise awareness of social issues to promote well-being.
Cognitive behavioural therapy	Approach implemented by specialist staff, aiming to target current mental health problems and symptoms	School-based intervention in Istanbul, Turkey, used cognitive behavioural therapy to address the mental health issues of war-traumatized Syrian refugee students, almost all of whom had experienced the death of someone close to them during the war. It was implemented by specially trained Arabic-speaking teachers. Eight weekly sessions lasting for 70–90 minutes with groups of 8–10 refugee

Intervention type	Description	Examples
		students followed a specific sequence that included relaxation techniques; the identification and management of strong emotions; maladaptive thinking and depression signals; the use of drawing, trauma narrative and writing techniques to address grief; and planning for stress management in the future.

Source: Authors' Own using data from UNESCO GEM, 2019, pp. 7–9

Finally, the previously mentioned World Bank report identified the types of SEL interventions that target adolescents and youth (typically aged 13 to 30). These interventions often targeted vulnerable groups such as unemployed young adults and out-of-school adolescents. The below table outlines the types of interventions identified in this review.

Table 4: summary of out-of-school interventions to develop SEL

Programme-type	Target beneficiaries	Summary of types of interventions
Out-of-school programmes	Youth of varying ages between 16 and 30, typically targeted at vulnerable groups such as unemployed adults or those at risk of or living with health conditions such as HIV, also out of school adolescents	• Job readiness skills (skills with high market demand) • Internships • Technical skills training (often in IT skills) • Soft skills training • Basic skills training (typically centered on building self-esteem) • Life skills training • Vocational training • Entrepreneurship training • Accelerated learning programmes for out of school youth • 'Healthy choices' training including managing stress, substance misuse, optimism, future-mindedness, health eating etc. • Sexual and reproductive health • Mentoring/counselling • Stipend/subsidies

Source: Sánchez Puerta et al., 2016 reproduced under CC BY 3.0 IGO

5. Outcomes associated with SEL

Outcomes associated with SEL can be broadly categorised into behavioural, skills development, improved mental health and academic success. The literature does not typically disaggregate outcome data by gender, particularly academic outcomes. The types of outcomes that are typically gendered relate to increased knowledge and awareness of sexual and reproductive health and delaying pregnancy. A USAID systematic literature review of SEL interventions, identified a broad range of outcomes identified in evaluations of SEL programmes, including: social/emotional, academic, well-being, workforce, teacher and school & community outcomes (Deitz et al., 2021, p. 36).

The outcomes of SEL are typically viewed in the short and long-term. The World Bank report identified that longer-term outcomes are typically best captured for before-school interventions, predominantly due to follow-up of participants being easier due to progression through school (Sánchez Puerta et al., 2016). The below diagram outlines an overview of what outcomes have been documented through SEL provision offered in a whole-school approach.

Image 1: social and emotional learning outcomes as a long-term process

This image has been removed for copyright reasons. The full figure can be viewed at https://kappanonline.org/social-emotional-learning-outcome-research-mahoney-durlak-weissberg/ figure 1.

Source: Mahoney et al., 2018

The University of Illinois at Chicago's Collaborative for Academic, Social, and Emotional Learning (CASEL) conducted a meta-analysis of 700 studies published up to 2007 that included school, family, and community interventions designed to promote social and emotional skills in children and adolescents aged 5 to 18. The meta-analysis of the studies found the following benefits for students (CASEL, 2008, p. 2):

- 9% decrease in conduct problems, such as classroom misbehaviour and aggression
- 10% decrease in emotional distress, such as anxiety and depression
- 9% improvement in attitudes about self, others, and school
- 23% improvement in social and emotional skills
- 9% improvement in school and classroom behaviour
- 11 % improvement in achievement test scores

The study found that the programs and interventions that made the most significant gains across all the above six listed outcomes areas were S.A.F.E (ibid, pp. 2-3):

- Sequenced – adopted a sequenced set of activities to develop SE skills in a step-by-step fashion
- Active – used active forms of learning such as role-plays and behavioural rehearsal
- Focus – attention was focused on SEL with a minimum of eight sessions devoted to the development of SE skills

- Explicit – explicitly target a particular SE skill, or set of skills, for development, with clear learning objectives

The CASEL study also found that the programmes with a longer duration, starting at preschool and continuing through secondary school, typically had the most favourable outcomes. Leadership support was also cited as another critical success factor (at both school level and in education authorities), ensuring that schools have adequate resources and appropriate teacher training to deliver high quality interventions. The success of SEL are reportedly based on safe learning environments with positive relationships between student and teacher, with classroom management strategies that address student need.

Example of an evidence-based SEL programme incorporating S.A.F.E principles at primary level

"Below is an example of how an evidence-based program uses S.A.F.E. in its overall program design and how it is used in the classroom. Promoting Alternative Thinking Strategies (PATHS) is an elementary school curriculum designed to promote children's social and emotional competence and critical thinking skills by providing instruction in and practice of a broad range of social and emotional skills.

Each lesson of the PATHS program specifies a learning objective related to teaching one of the four explicit social and emotional skills (i.e., identifying emotions, managing emotions, solving problems, and building relationships) on which the program focuses. Lessons build on one another in a sequence of active learning activities designed to enhance students' understanding of a skill through guided practice. One example of how PATHS uses these four strategies is a series of lessons for children in grades 1 and younger on increasing self-control and decreasing impulsivity as a prerequisite to using problem solving and adaptive interpersonal skills. In these lessons, children learn and practice the three steps of the Turtle technique to "withdraw into their shell—to calm themselves when strong feelings or other problems make them want to strike out: (1) Tell yourself to stop; (2) Take one long deep breath; and (3) Say the problem and how you feel.""
Source: CASEL (2008, p. 3)

Academic success

Academic success is often viewed as a longer-term goal of SEL programmes, and the effects on academic outcomes will likely therefore be outside the scope of many evaluations, which may account for overall weakness in the evidence base (as is explored below) (EEF, 2022). Nevertheless, there is a noted connection in the literature between SEL and academic outcomes. The majority of evaluations that connect SEL with academic outcomes are in high-income contexts, indicating a limitation in the overall literature base. This section will therefore predominantly draw on literature from the United States, Europe and Australia. The studies also typically fail to disaggregate by gender.

Mahoney et al (2018) conducted a review of meta-analysis on SEL. The review identified academic success as being one of the key outcome areas that remained positive even during follow up, where many SEL indicators waned. The below two tables highlight overall results from four meta-analyses into SEL interventions, showing the effect sizes (ES) aggregated in each meta-analysis by outcome-type. Whereas there were lower effect sizes in follow up studies (i.e.,

studies that measured SEL skills a minimum of three months after the end of an intervention) were relatively low for SEL (.07 in the Sklad et al, 2012 meta-analysis), there was overall consistency in meta-analysis findings showing a positive association with academic outcomes in post-intervention compared to follow-up assessments (effect sizes ranging from .26 to .33, all statistically significant). Similar effects were seen at all levels of education.

Table 5: Comparison of post-intervention outcomes for two meta-analyses of SEL programmes (Mahoney et al)

This image has been removed for copyright reasons. The full figure can be viewed at https://kappanonline.org/social-emotional-learning-outcome-research-mahoney-durlak-weissberg/ table 2.

Source: Mahoney et al (2018)

Table 6: Comparison of follow-up outcomes for two meta-analyses of SEL programmes

This image has been removed for copyright reasons. The full figure can be viewed at https://kappanonline.org/social-emotional-learning-outcome-research-mahoney-durlak-weissberg/ table 3.

Source: Mahoney et al (2018)

A meta-analysis by the EEF found gains in student academic performance at both primary and secondary level, with greater gains at secondary (EEF, 2022). On average, SEL interventions were associated with the equivalent of 4 months in learning gains for primary students, and 5 months for secondary-aged students. The EEF also identified that gains tended to be greater for literacy (+4 months) compared to mathematics (+3 months). The below outlines the interventions most associated with positive academic gains amongst primary and secondary students (ibid):

- Interventions that focus on social interaction (+6 months)
- Interventions that focus on personal and academic outcomes (+4 months)
- Interventions aimed at preventing problematic behaviour (+5 months)

The review also found that shorter interventions, lasting approximately 30 minutes, that were frequent (4-5 times per week) were the most successful type of intervention in academic learning gains (ibid).

In a review of girls' clubs during Covid-19 school closures in Kenya, it was found that girls' clubs, when girls were also provided with paper-based learning materials, had the greatest impact on learning outcomes (when compared with girls who did not attend girls' clubs, and girls who attended girls' clubs with no access to resources). The median scores for girls that used both modalities were 8.3 percentage points higher for reading and 17.6 percentage points higher for mathematics compared to girls who accessed neither (Amenya et al., 2021, p. 2).

From Marcus et al's (2017, p.50) review of girls' clubs and life skills programmes, only one evaluation directly explored the effects of increasing self-confidence and growing aspirations on girls' educational outcomes. CHATs in Malawi initially provided scholarships for girls to improve educational attainment, but from 2013-14 school year started to offer extra-curricular clubs. There was some evidence of improved academic outcomes in some subjects, but worsening outcomes in others.

SEL outcomes

The goals of SEL are typically related to areas of education that can have an indirect impact on learning outcomes. In the LEGO Foundations review of SEL system reforms, SEL was considered to; reduce high levels of violence in society (Peru and Colombia), enhance self-concepts and self-images that had been diminished due to years of systemic discrimination and exploitation (South Africa), helping children adapt to an ever-changing world (Australia) and improving learner wellbeing (Finland and South Korea) (The LEGO Foundation, 2022, p. 8). SEL programmes have also been linked with a reduction in school suspensions and dropout rates, for example, which in turn will positively impact learning (Green and Garcia-Millan, 2021, p.16). They are also associated with lower levels of depression, self-destructive behaviour, substance misuse and behavioural problems (CASEL, 2008).

Girls' clubs have been associated with improved school enrolment and attendance (Page, 2020), which may in turn impact on academic performance. Girls' clubs have also been found to support girls in delaying or avoiding pregnancy through development of social networks (Bandiera et al., 2019). In Amenya et al's (2021) study on girls' clubs in Kenya, girls' clubs not only improved academic outcomes, but also gave girls a safe space to meet and learn together collaboratively in a way they described was not possible at school (Amenya et al, 2021). Girls described boys often dominating classroom interactions at school, or them feeling uncomfortable engaging in whole-class settings. Girls also reported that helping one another to learn increased their self-esteem and motivated them in their education.

SEL has also been associated with a reduction in behaviours and attitudes that promote conflict and violence. Mutto et al (2009) in their evaluation of Mato-Oput5 in Northern Uganda involved teachers delivering curriculum content with the aim of reducing conflict and promoting behaviours such as kindness, forgiveness and empathy through two 40-minute sessions on a weekly basis. Metrics assessing student behaviour in forgiveness and kindness improved amongst the intervention group, though the results were not significant (potentially due to the small sample size).

Wider outcomes are also associated with play in Early Years settings. Solis et al (2020) for example outline three ways in which play supports learners.

Table 7: The benefits of play

Area	Description
Help children cope with stress	Link between play and children understanding the demands of their environment, responding to challenges with creative problem solving, and managing their anxiety in stressful situations.

Area	Description
Development of self-regulation	Socio-dramatic play, storytelling and story-acting can increase positive feelings and promote cognitive skills critical to managing emotional and behavioural responses.
Supports children exposed to severe and prolonged adversity	Play can address the needs of children who have experienced abuse, violence, poverty, illness and other forms of adversity.

Source: Authors' Own using data from Solis et al, 2020 pp. 2-3

Key policy considerations

Green and Garcia-Millan (2022), in their overview of SEL programmes globally, identified key learning for implementation for policy-makers.

Table 8: how to successfully implement solutions to increase the quality of social and emotional learning

Area	Description
Embrace trial and error	Educational innovation and scaling is a process of trial and error in different contexts over time. Therefore, it is also important that innovators and policymakers engage in continuous discussions based on the knowledge of implementing SEL innovations with children, teachers and in schools.
Reference SEL explicitly	SEL should be explicitly mentioned in the national and local curricula. The explicit articulation of social and emotional learning as a necessary part of schooling helps innovators to find an entry point into conversations with school leaders, and also encourages school leaders to seek out innovations to develop their SEL curricula.
Make SEL context-relevant	Adapt social and emotional learning programmes to the local situations and conditions of the students' lives, including language translations and context-appropriate materials.
Take a whole-school approach	When SEL is taken at a school-wide level and supported by school leaders and administrators, it can be easier for teachers to get the resources they need to implement SEL innovations effectively, including time and materials.
Empower teachers	When teachers have the tools to make informed decisions about which innovative SEL pedagogical practises to adopt into their daily routines, SEL is more likely to be implemented well. For this, teachers need support to develop their own social and emotional competence, reflect on their interactions with students and their knowledge of their students' individual circumstances. More resources need to be directed into integrating SEL in teacher education, both for pre-service and in-service teachers
Engage local communities	The different communities surrounding children play an important role in developing SEL. Effective SEL requires that the wider education community understand its importance and are engaged in the process

Area	Description
Collaborate with public administrators and researchers	In order to create systemic change and impact, the implementation of SEL should and must be the result of a co-design process shared by education professionals, such as teachers and school administrators, policymakers and education decision-makers, as well as academics, including researchers and teacher educators.
Incorporate professional guidance	Psychologists and trained staff can support schools as they implement SEL programmes by creating relevant tools, guiding teacher practises and supporting students' mental health.

Source: Authors' own using data from Green & Garcia-Millan, 2021

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- List all contributors who responded with any useful information, even if it was just some literature suggestions
- Include only their name and the organisation they are affiliated with. Do not include their email address.
- If nobody at all contributed, then leave this section out of the report
- The expert appendix, if you have one, should only include substantial comments; don't bother including the whole email message sent by someone who only provided links to some papers.

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