“Children exposed to Think Equal were more socially and emotionally skilled and less likely to be anxious, angry, aggressive and withdrawn than their peers who did not have access to Think Equal. These impacts were extremely large, and are supported by anecdotal reports from educators.”

Results revealed significant, large effects for access to Think Equal on five out of eight outcomes. Access to Think Equal was associated with:

- greater Emotion Regulation ($d = .85$)
- less Emotion Dysregulation ($d = .79$)
- less Anger and Aggression ($d = 1.49$)
- less Anxious and Withdrawn ($d = 1.29$)
- greater Social Competence ($d = 1.10$)
“While quantitative analysis is currently being undertaken for the 2019 evaluation, the qualitative findings reveal that the program has a remarkably positive impact on participant (treatment) children’s self-regulatory behaviour, emotional literacy, fairness, and conflict resolution.”

“The unique aspect of the Think Equal program is that it specifically focuses on equality between gender and race, which is why these SEL tools are particularly relevant for today’s world, as they create the skills necessary for children to be able to identify and manage their emotions, develop care and concern for others, make responsible decisions, establish and handle interpersonal situations effectively.”

40 centres and 280 children participated in this study within the Australian States of Victoria through the Moreland City Council, and Queensland through the Avenue Learning Centres. The qualitative analysis draws on the feedback from teachers in their training sessions; the teacher support and feedback forums, and consultations with individual teachers.

The feedback from teachers and parents indicated that the children in the treatment group who went through the 30 weeks of Think Equal training learned a wide range of vocabulary from the program about feelings, empathy and language to calm themselves, and were better able to:

- express their feelings, and to do that more consistently and clearly than the control group
- find opportunities to comprehend and express examples of ‘same’ and ‘different’
- recognise empathy and acts of kindness in themselves and others
- comfort other children and their drawings show people with a variety of facial expressions that indicate feelings
Observations of the children’s behaviour:

- They were more accepting of difference
- Better supported and cared for each other
- Higher self-regulation levels
- Increased ability to identify and communicate feelings
- Used conflict resolution strategies during class and at home
- Were able to communicate calmly when conflict arose
- Were able to talk about their feelings and behaviours more
- Had greater understanding of issues such as ‘difference’ and ‘same’
- Were more confident and able to try new things
- Took responsibility in situations that required problem solving and inclusion
- Required less adult supervision and intervention
- Showed more respect to each other
- Could identify turbulent feelings in themselves and others
- Change in their play to include greater care for each other.

“during our discussions around reconciliation the children were able to use the skills they have learnt through Think Equal to understand and acknowledge ‘fair’ and ‘unfair’ behaviour and verbalise how Indigenous Australians may feel.”

“…one little boy who was very unsettled and distracted is now able to settle himself and has become an engaged and responsive group member”

The mother of a 4-year-old child had informed the teacher at the start of year that her daughter was self-harming at home and was frustrated and unable to express her emotions. After completing the program her mother reported that she had noticed that child was expressing and labelling her emotions at home e.g.: “I am happy” “You made me upset” and remarkably her self-harming had ceased.
One of the teachers reported her observation of a young girl who, at the beginning of the year refused to hold the hand of another child whose skin was a darker colour, and at the end of the year was happy to do so.

Teachers reported that the music and the “belly buddies” had a reassuring and calming effect; the teachers and parents noticed that the kindness garden exercise really lessened his anxiety, particularly for one child who was struggling with separation anxiety.

Another of the teachers reported that one of the most valuable aspects of the program is its visual nature – particularly for children with second languages, saying they can see the emotions on the page even if they can’t understand some of the words.

The treatment children could also better recognise empathy and acts of kindness in themselves and others; and when they noticed and experienced that behaviour it had a calming effect – which provided a reinforcing loop.

The teachers already believed that they had generated a safe space for all children – so they were surprised to hear that when it was time to do the program the children said that the Think Equal session created the safest space of all. When asked why, a teacher in interview, posited that the program required the teachers to role-model the learnings which meant the teachers also had to share their feelings so when the teachers said ‘I feel happy or frustrated’ – the children could match the teachers emotion/feelings with their statements and behaviours which created a lived experience of the ‘adults being honest’.

Several other feedback examples are available from 13 other countries, on request.
Using a randomised controlled design, this study by Flook et al, “Promoting prosocial behavior and self-regulatory skills in preschool children through a mindfulness-based kindness curriculum”, investigated the effects of a 12-week mindfulness-based Kindness Curriculum (KC) delivered in a public-school setting, on executive function, self-regulation, and prosocial behaviour in a sample of 68 preschool children.

The KC intervention group showed greater improvements in social competence and earned higher report card grades in domains of learning, health, and social-emotional development, whereas the control group exhibited more selfish behaviour over time.
Evaluation of programmes included in TE

RULER Programme – Yale Center for Emotional Intelligence


A randomised control trial in 62 schools tested the hypothesis that RULER improves the social and emotional climate of classrooms. After one academic year, schools that ran RULER as compared to those which used the standard curriculum, were rated by independent observers as having:

• higher degrees of warmth and connectedness between teachers and students,
• more autonomy and leadership, less bullying among students,
• and teachers who focused more on students’ interests and motivations.

In addition, classrooms in RULER schools demonstrated better academic performance, increased students’ emotional intelligence and social skills, decreased students’ anxiety and depression as well as staff who experience less burnout and feel more positive about teaching.
Impact Studies Summaries
Nobel laureate James Heckman found that SEL not only has long term (into midlife) positive effects on crime, employment, health, cognitive and non-cognitive skills and other outcomes for the participant (Heckman and Karapakula 2019), but also benefits those around them (Heckman and Karapakula 2019b).

Students who learned SEL in ethnically diverse and urban areas demonstrated fewer emotional and behavioural challenges during their adolescent years (Durlak et al. 2008).

A systematic review and meta-analysis of 79 unique studies (across 6 continents) indicated significant improvement in social competence, emotional competence, behavioural self-regulation, emotional and behavioural problems, and early learning outcomes compared with control participants (Blewitt et al. 2018).
The High/Scope Perry Preschool study: Lifetime Effects: The High/Scope Perry Preschool Study through Age 40 – Barnett et al.

Conducted from 1962-1967, leading to longitudinal studies, the High/Scope Perry Preschool study identified a sample of 123 low-income African-American children who were assessed to be at high risk of school failure. It randomly assigned 58 of them to a programme group that received a high-quality preschool programme at ages 3 and 4, and 65 to another group that received no preschool programme.

The major conclusion of this Perry Preschool research study is that high-quality preschool programmes for young children living in poverty contribute to their social development in childhood and their school success, economic performance, and to a reduced commission of crime in adulthood. This study further demonstrates that these findings extend not only to young adults, but also to adults in midlife.

Adults aged 40 who underwent the preschool programme had higher earnings, committed fewer crimes and were more likely to hold a job and have graduated from high school. It confirms that the long-term effects are lifetime effects. The return per dollar invested is estimated to be $12.90 (see Figure 2).
SEL in Early Years

• The Perry Pre-schoolers at Late Midlife: A Study in Design-Specific Interference (2019) by James Heckman presents an analysis of the life course outcomes through late midlife (around age 55) for the participants of the Perry Project. Via statistical testing, it indicates long-term positive effects on crime, employment, health, cognitive and non-cognitive skills and other outcomes for Perry participants.

• Intergenerational and Intragenerational Externalities for the Perry Preschool Project (2019) examines the positive impact of the Perry Project on the children and siblings of the original participants. Investing in Early Years SEL for students is therefore shown to have positive implications that reach beyond the individual participant.

• Social and Emotional Learning Associated With Universal Curriculum-Based Interventions in Early Childhood Education and Care Centers (2018) - Blewitt, et al. A systematic review and meta-analysis of 79 unique studies (across 6 continents but the vast majority from North America) with 18,292 children between the ages of 2–6 exposed to a universal social and emotional learning intervention. The review indicated significant improvement in social competence, emotional competence, behavioural self-regulation, emotional and behavioural problems, and early learning outcomes compared with control participants.
SEL longitudinal studies and other


• The Impact of Enhancing Students’ Social and Emotional Learning: A Meta-Analysis of School-Based Universal Interventions (2011) – Durlak, et al. A meta-analysis of 213 school-based SEL programmes, involving 270,034 kindergartners through high school students (87% within the US) from studies produced between 1970-2007. Compared to controls, SEL students demonstrated significantly improved social and emotional skills, attitudes, behaviour, and academic performance that reflected an 11-percentile-point gain in achievement.

• Extension of above 2011 review: Promoting Positive Youth Development Through School-Based Social and Emotional Learning Interventions: A Meta-Analysis of Follow-Up Effects (2017) – Taylor et al. Meta-analytic review that synthesised results from 82 school-based SEL interventions (38 outside of the US) involving 97,406 kindergarten to high school students from diverse racial and socioeconomic backgrounds. In evaluating whether SEL interventions yield significant effects at follow-up (for a subsample this was up to 18 years after) the study indicated a number of outcomes: in addition to fostering social and emotional skills and positive attitudes in students, these programmes were shown to be linked to enhanced long term academic performance and are able to serve as a protective factor against the development of subsequent problems – i.e. conduct problems, emotional distress and drug use. For a subsample, an improvement in future social relationships, increased high school graduation rates and college attendance, and reduced later negative outcomes such as arrests or the presence of clinical disorders was also tracked.
Developmental Differences in Prosocial Behavior Between Preschool and Late Elementary School (2019) – Flook et al. In comparing the responses of 46 pre-schoolers (mean age of 4.95 years) and 52 5th graders (mean age of 9.98 years) on two social decision-making paradigms, the study concludes that while with higher cognitive capacities and more complex reasoning developing over the course of childhood, discernment is possible, discrimination is also possible. Older children shared more selectively depending on the recipient than younger children, who shared resources more equitably. It suggests that the way these abilities are shaped or trained has important consequences for societal evolution: ‘deliberately cultivating generosity and related qualities such as empathy, kindness, forgiveness, and compassion through education may have the potential to transform and channel developing capacities in ways that benefit humanity as a whole’.

Children who understand emotions become more attentive over time (2015) – Denham et al. This research project surveyed 261 children from 33 kindergartens in Germany as well as their teachers and parents. The study tested children’s ‘emotion knowledge’: i.e. their ability to identify facial expressions of emotions. Children who had better emotional literacy had fewer attention problems later on, even after demographic factors had been considered. This was traced to promote helpful behaviour such that children become less often angry and aggressive and have more productive relationships with teachers and peers, as well as increased academic achievements.

Empowering Children (2005) – Howe and Covell shows that when children are taught about their rights as described in the UNCRC in a rights-consistent environment, they become more respectful of the rights of all other children. An ethos of knowledge and respect for rights can do much to reduce bullying, racism and xenophobia. The authors suggest that equalities-focused education interventions has a ‘contagion effect’ that has broader implications on general knowledge on human rights and social responsibility.

Social and Emotional Learning (SEL) and Student Benefits: Implications for the Safe Schools/Healthy Students Core Elements’ (2003) – published by CASEL, states that Social and Emotional learning leads to a greater attachment to the educational setting and less risky behaviour.
SEL longitudinal studies and other

- **Effectiveness of School-Based Universal Social, Emotional, and Behavioral Programs: Do They Enhance Students’ Development in the Area of Skill, Behavior, and Adjustment? (2012)** – Sklad et al. Meta-analytical review of 75 recently published studies (from the past 13 years) that reported the effects of universal, school-based social, emotional, and/or behavioural (SEB) programmes in primary and secondary school children – 75% of the studies were conducted in North America. The analysis demonstrated that overall, beneficial effects on all seven major categories of outcomes occurred for those who participated in SEB programmes: social skills, antisocial behaviour, substance abuse, positive self-image, academic achievement, mental health, and prosocial behaviour.

- **The Positive Impact of Social and Emotional Learning for Kindergarten to Eighth Grade Students: findings from three scientific reviews (2008)** – Durlak et al. This report summarises results from three large-scale reviews of research on the impact of early SEL programmes on elementary and middle school students. SEL programmes were effective in both school and after-school settings, and for a diverse range of students: ethnically and demographically (in terms of those from urban rural and suburban settings) and those with and without behavioural and emotional problems. SEL programming was tracked to improve students’ academic performance by 11 to 17 percentile points.

- **Early Childhood Interventions: Proven Results, Future Promise (2005)** – Karoly et al. In this thorough review of impact and return on investment for 20 early childhood programmes (predominantly across the US), it concludes in highlighting the period from birth to age 5 as one of vital opportunity and vulnerability for healthy physical, emotional, social, and cognitive development. It suggests that early childhood interventions can improve the lives of participating children and families in both the short term and long term. It also concludes that the favourable societal effects of early childhood programmes can translate into ‘dollar benefits for the government, participants and other members of society’ – it calculates that the returns to society for each dollar invested range from $1.26 to $17.07.
Quantifying the Life-cycle Benefits of a Prototypical Early Childhood Program (2017): García & Heckman et al. Nobel laureate and economist James Heckman has produced multiple studies that indicate that high quality birth-to-five programmes for children, particularly those disadvantaged, can deliver a 13% per year return on investment (ROI). This return is represented in improved academics and productivity and lower social costs like prison and welfare. As demonstrated in the figure, programmes that target the earliest years offer the largest returns.

Benefits of SEL: Economic Focus

- **The Economic Value of Social and Emotional Learning (2015)** - Belfield et al. The six interventions used for improving SEL skills show measurable benefits that exceed their costs, often by considerable amounts. On average, for every dollar invested equally across the six SEL interventions, there is a return of $11.

- **Dr. Paul Gertler, Li Ka Shing Professor of Economics at the University of California, Berkeley** (as cited in Gutaffson-Wright, 2014) also concluded, following his evaluation, that investing in early childhood education yields a much higher return on investment than any other time in the life cycle, and also contributes to levelling the playing field and preventing the emergence of large inequalities.

- The **National Forum on Early Childhood Policy and Programs** has found that high quality early childhood programmes can yield a $4 – $9 dollar return per $1 invested.

- **Early Childhood Development with a High Public Return, 2003** - Rolnick & Grunewald of the Minneapolis Federal Reserve Bank. The paper examines the returns on investment of early education in Minnesota compared to other state investments. They conclude that early education investments yield a return that far exceeds the return on most public projects that are considered economic development. When evaluating the Perry Preschool programme, it found a return on investment of 16 percent, with 80 percent of the benefits going to the general public. The authors recommend creating a foundation endowment to fill the gap in current services in Minnesota by fully funding a high-quality programme for all 3- and 4-year-old children in poverty.
EMPOWERING CHANGE THROUGH EDUCATION