

MODELS AND PROGRAMS FOR ENHANCING SOCIAL AND EMOTIONAL LEARNING IN DISADVANTAGED SCHOOLS

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ABSTRACT

This project sought to help the NCESE identify and connect with effective social and emotional learning (SEL) approaches being implemented in the US for use in Broadmeadows, Australia. Broadmeadows would benefit from SEL due to a significant lack of school readiness among local youth.

The team identified successful SEL approaches used in the United States, researched their practices and efficacy, and recommended to the NCESE ones that are compatible with the social and emotional needs of students in Broadmeadows.

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INTRODUCTION

The fundamental goal of education should be to provide every student with not only academic skills but also with interpersonal and intrapersonal skills that they can rely on for the rest of their lives. If every student at a school came from a loving family, had sufficient funds to buy school supplies and necessities, and could sustain good mental health and healthy relationships, this would be a much easier task than it is in reality. Instead, many students struggle daily with situations outside their control, from traumatic home experiences to socioeconomic issues to being bullied. Without personal connections to reinforce social development, students can experience long-lasting issues with trust and communication. These sorts of disadvantages challenge a student emotionally and academically, making it harder for them to focus in the classroom and interact productively with their peers. When a student's emotional skills are not accounted for and developed accordingly, they are more likely to struggle in and out of the classroom, get into physical altercations, or even drop out.

Social and emotional literacy is crucial to the development and success of every child.

The Social and Emotional Learning (SEL) framework was created in 1994 to promote these skills in schools, but for most schools it has only recently become a prominent aspect of classroom activities. Since SEL is not usually embedded into academics by schools, many organizations have formed separate SEL curriculums that may be integrated into a pre-existing curriculum or used on their own. These help schools that are unfamiliar with SEL teach social and emotional skills effectively.

As SEL is still relatively new, more research is needed on particular methods of teaching social and emotional skills and their efficacy, especially on their use in disadvantaged areas. Even with the limited research available now, it is clear, however, that SEL has positive effects on the students who encounter it. According to a study done by the Collaborative for Academic, Social, and Emotional Learning (CASEL), students who took part in SEL

programs showed an eleven percent increase in academic performance over those who were not in an SEL program (Gunn, 2018). In addition, they showed improved classroom behavior, an increased ability to manage stress and depression, and a better attitude about the school, others, and themselves. Adults who participated in an SEL program in primary school have shown improvements across many areas of their lives. Long term studies also reported by CASEL suggest that, "at age 25, people who were assigned to the program are happier, have fewer psychiatric and substance abuse problems, are less likely to have risky sex, and are arrested less often for severe violence and drug-related crimes" (Gunn, 2018).



One group, the Northern Centre for Excellence for School Engagement (NCESE), is trying to improve the social and emotional development of students in Broadmeadows, a suburb of Melbourne, Australia. This group has noted that children who experience traumatic situations at home can be negatively

affected in their development of interpersonal skills. The Australian Institute of Health and Welfare collected data in 2017 and 2018 on the number of Australian children ages 0–12 involved in one or more substantial child protection cases (Australia's Children, Child Abuse and Neglect, n.d.). This data shows that 36% of children involved in these cases were in the lowest socioeconomic group and 24% were in the second lowest, while only 6% of cases came from the highest socioeconomic group. This demonstrates the strong correlation between low socioeconomic status and higher rates of adverse childhood experiences. The community of Broadmeadows is one such socioeconomically disadvantaged area, with the median yearly income per household in Broadmeadows falling just below Australia's poverty line (2016 Census QuickStats: Broadmeadows, n.d.; 2016 Census QuickStats: Australia, n.d.). While SEL can help all students succeed, disadvantaged and struggling students have shown the greatest improvements from social and emotional education (McClelland et al., 2017). This makes SEL an ideal framework for supporting students in Broadmeadows.

In practice, the NCESE helps to link schools to health services, human services, and welfare groups, bringing families, healthcare providers, social workers, and communities together to give families the resources they need to succeed (E. Dommers & J. de Loma-Osorio Ricon, personal communication, September 23, 2021). The organization also seeks to support schools in addressing school engagement for every student, though they specialize in re-engaging disengaged students. The NCESE seeks to foster strong relationships between students and their peers, students and teachers, and teachers and their peers. The curriculum of NCESE schools is becoming increasingly focused on SEL and executive functions, and NCESE school teachers receive training in teaching practices that help build staff and student SEL, promoting a growth mindset (NCESE Building Blocks for Engagement, n.d.).



In this project, we investigated SEL programs in the United States and recommended organizations that the NCESE might partner with to expand their repertoire of SEL teaching practices. To achieve our goal, we first developed an understanding of the need for better social and emotional support in Broadmeadows. We then identified specific US SEL programs and researched their techniques and outcomes. Through this research we determined what SEL training resources these programs provide, what they look like in the classroom, and how they are implemented in schools. Finally, we analyzed the data gathered on these SEL programs to determine which are feasible and appropriate for the NCESE to research further. We recommended programs that have shown efficacy with socioeconomically disadvantaged students, especially those who have experienced trauma. We then helped the NCESE connect with these programs. By focusing our research on the practical implementations of various SEL techniques, we aimed to provide teachers working with the NCESE with the tools they need to implement SEL strategies in the long term.

BACKGROUND

In this section, we provide the necessary context to understand our project. First, we define Social and Emotional Learning (SEL). Next we look at its impact on disengaged students and common approaches for teaching social and emotional skills. Finally, we introduce our sponsor, the context that they work in, and why SEL is so necessary for their partner schools.

SOCIAL AND EMOTIONAL LEARNING

Social and emotional learning is an integral part of education and human development in all stages of life. It is the process by which young people and adults acquire the ability to apply emotional intelligence, allowing them to manage their emotions, achieve personal and collective goals, develop healthy identities, establish and maintain meaningful relationships, show empathy for others, and make responsible decisions (CASEL, n.d.).

Every young person needs these skills to develop a foundation of emotional competency that will enable future successes



The Collaborative for Academic, Social, and Emotional Learning (CASEL) originally designed the SEL framework two decades ago. According to members from the National Commission on Social, Emotional, and Academic Development at the Aspen Institute, this framework, “involves a coordinated set of evidence-based programs and practices for enhancing social-emotional-cognitive development, positive behavior and interpersonal relationships, and academic performance” (Mahoney, 2020). The major goals of SEL are to establish a safe and supportive learning environment and to foster social and emotional competencies, shown in Table 1. When well-designed SEL practices are implemented into school systems with fidelity, they have the ability to help all students and the adults handle daily tasks and challenges and to achieve greater success in school, work, and throughout their daily lives.

SKILL	TARGET
<i>Self-management</i>	The ability to regulate thoughts, emotions, and behaviors
<i>Self-awareness</i>	The ability to recognize one's emotions
<i>Social awareness</i>	Awareness of the culture, beliefs, and feelings of the people and world around oneself
<i>Relationship skills</i>	The ability to effectively communicate, work with peers, and build meaningful relationships
<i>Responsible decision-making</i>	The ability to make plans for the future, follow moral and ethical standards, and contribute to the well-being of others



These five competencies have a major impact on short and long-term outcomes in students' lives, influencing their attitudes, social behavior, conduct, emotional state, and academic achievement. The competencies can be a factor in whether students graduate, have good mental health, avoid criminal behavior and substance abuse, and engage actively as citizens. Many studies have shown that this framework can help students achieve social and emotional skill improvement (Ross et al., 2018). For example, a study on the effects of SEL on 696 first graders showed that students that took part in the program had significant improvements in teacher-reported academic engagement, motivation, empathy, and social engagement compared to those students who did not (Clyde et al., 2018). Evidence on the efficacy of these programs has led CASEL to help hundreds of school systems across the United States implement similar practices into their institutions.

Another popular framework for developing social and emotional skills in students is the Positive Youth Development (PYD) framework. This framework arose around the same time that CASEL was developing theirs, and was based on a body of research that suggests certain "protective factors," or positive influences, can help young people and reduce their chances of developing issues. The PYD perspective moves beyond the negative, deficit view of youth in developmental science and education toward one that highlights strengths and positive qualities while defining desired outcomes. As described by Katherine Ross, a postdoctoral research fellow at the Clark-Hill Institute for Positive Youth Development, "The PYD framework focuses on how aligning adolescent strengths with external resources and opportunities can promote optimal development or 'thriving,'" (Ross et al., 2018). It emphasizes the dynamic nature of development and adolescents as agents of their own development, while introducing a more affirmative and welcome vision for young people, seeing them as resources for the community instead of problems for society (Damon, 2004). The framework is composed of the "Five C's" shown in table 2. These five constructs positively correlated with measures of educational and civic engagement and negatively correlated with mental illness symptoms and delinquency (Bowers et al., 2010; Phelps et al., 2009).

"C"	DESCRIPTION
<i>Competence</i>	Positive views and performance in the social, academic, cognitive health, and vocational domains
<i>Confidence</i>	An overall sense of positive self-worth
<i>Connection</i>	Positive and reciprocal relationships with peers, family, school, and community members
<i>Character</i>	Acting within the moral, societal, and cultural expectations
<i>Caring</i>	Showing compassion towards others



The CASEL framework and PYD overlap substantially in their ideals, one example being that both view development through the lens of opportunity, as opposed to deficit (Ross et al., 2018). However, they do differ in their theoretical linkages. SEL is more focused on specific skill promotion and behavior change through teaching and practice, often in a traditional classroom setting. PYD, on the other hand, focuses on bringing external resources alongside existing strengths in students, which often takes place in a community setting, not an academic one. In terms of outcomes, CASEL's SEL framework tends to focus on social and academic outcomes, while PYD looks at societal contribution and engagement opportunities. These differences have led to divergence in their developmental focuses: SEL studies predominantly observe early childhood and elementary students, while PYD studies concentrate more on adolescents. While both approaches are effective in helping youth develop, the NCESE works primarily with primary schools, so SEL's focus on early development is more suited to the needs of these schools than PYD's focus on adolescent behavior.



As students are developing these social and emotional skills, it can be extremely beneficial to track their progress. There are many different 'generic' assessment tools out there that allow educators to identify strengths in the students' social and emotional skills or to recognize areas that they are having the most difficulty in. If a school system assesses a large enough sample of the students, they can use this data to identify which aspects of the program are working well, and which parts may need some more attention. A more consistent assessment, maybe once a year, can allow the school system to see if the changes they are implementing actually makes a meaningful impact. Some SEL programs or approaches come with their own assessment tool for teachers to track their students' developmental process. These can be much more effective than the generic assessment tools, because they can specifically look at the skills that their program focuses on.

STUDENT ENGAGEMENT

SEL is particularly helpful for addressing issues in student engagement. Student engagement can be defined through three interrelated dimensions of learning: behavioral, emotional, and cognitive (Murray, 2004).

- **Behavioral:** Active participation in learning; includes the involvement in academic, social, and extracurricular activities
- **Emotional:** Encompasses positive and negative feelings which can affect attitudes toward classmates, teachers, academics, and school in general
- **Cognitive:** invested effort to focus on learning; incorporates thoughtfulness and willingness to exert the effort necessary to comprehend complex ideas or master difficult skills

Sally Murray, a researcher from the Centre of Childhood Studies at the Monash University of Melbourne, proposes that at the very least, student engagement is important for three reasons. Firstly, engagement makes a difference in student achievement. In order for a student to learn effectively, they must be attentive, persistent, have adequate time for the task, be able to interact with others, and then have the opportunity and ability to reflect on what they learned. Secondly, engagement is important because it promotes important goals of schooling beyond academics. Schools in which students are effectively engaged are happy places where students can feel a consistent sense of belonging and self-worth. Murray explains, "Too often the social and emotional dimensions of schooling are overshadowed by the all-important goal of achievement" (Murray, 2004). Finally, student engagement is critical in an age that values lifelong learning, active citizenship, and responsibility for self. The goal of engaged learning is not about passively listening to the wisdom of adults, but instead developing students into doers and decision-makers, teaching them skills that will serve them throughout adulthood. At its core, SEL looks to develop the necessary skills to be an effective and engaged learner and creates a safe learning community.

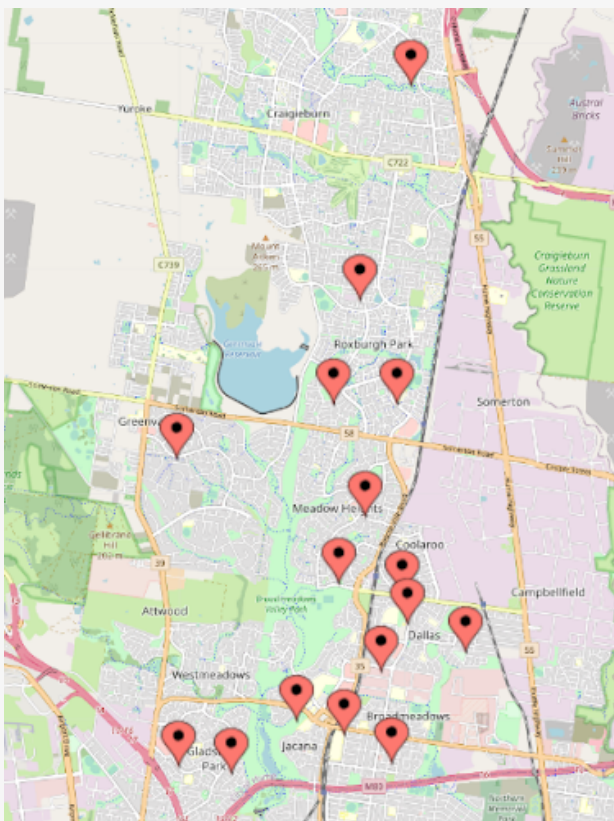
BROADMEADOWS AND THE NORTHERN CENTRE FOR EXCELLENCE IN SCHOOL ENGAGEMENT

Broadmeadows is a suburb of the city of Hume, located in the north-west metropolitan area of Melbourne, Victoria. It is home to about 14,500 people and contains a large public housing complex with about 2,000 public housing properties. Victoria has a relatively steady unemployment rate, hovering around 5-6 percent, but unemployment in Broadmeadows is high: three to four times higher than that in Melbourne (E. Dommers & J. de Loma-Osorio Ricon, personal communication, September 23, 2021). This issue has no easy fix, as evidenced by the fact that Broadmeadows and surrounding suburbs still have high unemployment rates after four years of government programs to eradicate unemployment. In 2016, Broadmeadows faced the second highest unemployment rate in the state at 24.4 percent, so the Melbourne government gave the Hume council \$1 million to help the people of Broadmeadows find work. Despite this, the unemployment rate had not improved as of March 2021 (Meade, 2021). In Broadmeadows' public housing, unemployment is so high, at roughly 80%, that it is unusual to find someone who is employed (E. Dommers & J. de Loma-Osorio Ricon, personal communication, September 23, 2021).

Data on school readiness clearly displays the strong need for social and emotional support for Broadmeadows students. The Australian Early Development Census (AEDC) is a nationwide data collection on early childhood development that is collected every three years when children start their first year of full-time school (Australian Government. AEDC, 2018). The Australian government uses this data to highlight what is working well and what needs to be improved in student school readiness. The census collects data on five key areas of early childhood development:

- Physical health and well being
- Social competence
- Emotional maturity
- Language and cognitive skills
- Communications skills and general knowledge

Students in Broadmeadows are struggling in these five domains at a much higher rate than their peers in Victoria. According to the data from the AEDC, about 20% of students in Victoria are developmentally vulnerable in one or more domains, while the number shoots up to nearly double, 37.3%, in Broadmeadows. This increase is significant and clearly shows that change is necessary to increase Broadmeadows students' competency to the level of their peers. The NCESE represents that change, working with 17 primary schools and one secondary school. They run flexible learning options (FLOs) outside the standard curriculum to help reengage students who schools do not know how to handle.



An example is Project REAL, a FLO at Banksia Gardens where students are given the opportunity to receive intensive academic, social, and family support. Prior to this project, another research team from WPI worked with the NCESE investigating the impact that FLOs can have and connected the NCESE with the CREATE program from the United States (Toala et al., 2021). The NCESE also offers additional support to schools such as coaching services on handling especially disengaged students. They hold a series of on campus or online workshops for teachers and the community throughout the year such as: "The impact of Trauma on Learning & Development," "SEL and Executive Functions," and "The causes of disengagement and Tier 2-3 behaviors." They also hold a quarterly community of practice that is jointly led by principals and school leaders, that allows for discussion of what is going on in their schools. This allows the NCESE to identify specific areas that are particularly strong or maybe need some more work as they move forward.

METHODS

This project is designed to help the NCESE identify and connect with effective SEL programs that are currently being implemented in the US, and that could be applied or adapted for use in Broadmeadows. We created three objectives to complete this goal:

1. To identify effective SEL frameworks used in the United States
2. To understand the strategies and efficacy of these organizations and their SEL approaches
3. To recommend to the NCESE SEL approaches used in the US that are compatible with the social and emotional needs of students in Broadmeadows

OBJECTIVE ONE: IDENTIFYING RESOURCES

To determine relevant programs, we mostly used the CASEL database of 77 programs, as they are all evidence-based and approved by the organization that created the foundation of SEL. This database has an option to filter programs based on developmental stage, program approach, implementation, school and student demographics, and significant outcomes. We used a web scraper to concentrate program details into one spreadsheet, allowing us to easily compare and contrast them. In identifying SEL programs in the United States, we focused on educational

programs that support a younger demographic, especially elementary school, corresponding with the age range of students the NCESE works with. We picked programs that represent a variety of ways to support SEL, with a focus on curricula that show efficacy with low income and diverse students. We removed programs that are not translated into English or that only offer in-person training, as NCESE would need to communicate with them at a distance. Out of the remaining eligible groups, we identified 12 favorable programs to focus our research on.

OBJECTIVE TWO: LEARNING ABOUT US SEL PROGRAMS

After we decided which programs would best align with the NCESE's goals, we researched them to find initial data then contacted providers of the programs who could answer more specific questions and give a more qualitative idea of their unique approaches. We interviewed 12 program providers who have implemented those activities into their classrooms. Using the interview form in Appendix A, we put together semi-structured interviews with program providers to standardize the types of data we collected. Questions were also added in some interviews to get additional program-specific details as needed. These interviews took place virtually, which allowed us to record them. We sent our interviewees a consent statement (see Appendix B) to make sure they are okay with us recording and using the information they give us. This was reiterated at the beginning of each interview. In our interviews, we focused on both the theory behind developmental SEL approaches and on concrete implementation techniques. Alongside this, we gathered information about challenges of implementation, such as high cost or a requirement for large numbers of staff to be away for training simultaneously. A few of the core interview questions that we asked programs are listed below, see Appendix C for the complete list.

- In your experience, what is the most effective way to teach social and emotional skills? (eg: Modeling behavior, games/group activities, individual assignments)
- What do you look for to determine a student's social-emotional growth?
- How does [PROGRAM] handle disengaged students?
- Does [PROGRAM] support mental health in students and/or teachers?
- What does [PROGRAM] look like in the classroom?
- How have students, teachers, and schools reacted to [PROGRAM]?

OBJECTIVE THREE: MAKING RECOMMENDATIONS FOR SEL FRAMEWORKS

Our third objective was to present a report of SEL programs in the US to the NCESE and provide recommendations based on the developmental needs of students in Broadmeadows. To accomplish this, we considered a number of program factors related not just to overall program efficacy, but its use in disadvantaged communities. One consideration was cost, especially whether the program cost is reoccurring. Another deciding factor was whether the program has shown efficacy with low income and diverse demographics. We also considered whether the program has support for students who are particularly struggling, since students in the Broadmeadows area have complex backgrounds and needs. After collecting these factors and other more general factors, such as grade range and evidence for efficacy, into a matrix, we were able to compare and contrast programs to provide recommendations for the NCESE.



FINDINGS

PROGRAM	INTERVIEWEE
Caring School Community	Peter Brunn
Incredible Years	Jamila Reid
MindUP	Dido Balla
Positive Action	Melodie Hathorne
Promoting Alternative THinking Strategies	David Urbonas
RULER Approach	Nikki Elbertson
Second Step Elementary	Tia Kim
Social Skills Improvement System (SSIS)	Stephen Elliott
Student Success Skills	Greg Brigman
Tools of the Mind	Deborah Leong
Lions Quest: Skills for Growing	Matthew Kiefer
Conscious Discipline	Elizabeth Montero - Cefalo

Listed above are the twelve programs we contacted and interviewed over the course of our project. We created a matrix to compare these programs across a number of categories (see Appendix D) and data from the matrix is included alongside each program profile. Graphs showing the percentage of activities that effect categories of SEL skills also accompany the program profiles (Jones et al, 2021). As we were given the opportunity to interact and learn from each of these programs, we were also able to identify a set of common themes stretching across the different approaches.

COMMON SEL APPROACHES

Although each program has a unique approach to student education, we were able to identify some common factors between programs. Understanding that each prospective school has a unique set of circumstances that need to be met, identifying those common themes can help schools narrow down their search for an SEL approach that will work for them.

Some programs have a very structured curriculum that teachers are supposed to follow to a tee. These curriculums often consist of lessons spanning thirty minutes or less that are taught once or twice a week. This approach can be simpler to implement than other approaches, but it is not the most effective, as it separates social and emotional learning from academic learning. Students will still learn the skills they need, but they may not be as comfortable integrating them into their everyday life. Another, more effective, approach seen in many programs is to integrate SEL into the regular curriculum. This style of teaching creates a much more fluid learning experience, allowing students to better understand and successfully implement what they are learning. The downside is that full integration of SEL skills into academics and school life takes more effort and resources than only focusing on it once or twice a week.

Almost every program has a focus on modeling behavior, which is one of the most effective ways to teach these skills. If a student consistently sees someone they look up to, such as teachers, school workers, or other students, practicing SEL skills and strategies, they are much more likely to implement them into their own lives. This highlights the importance of teachers and school leaders being proficient in SEL



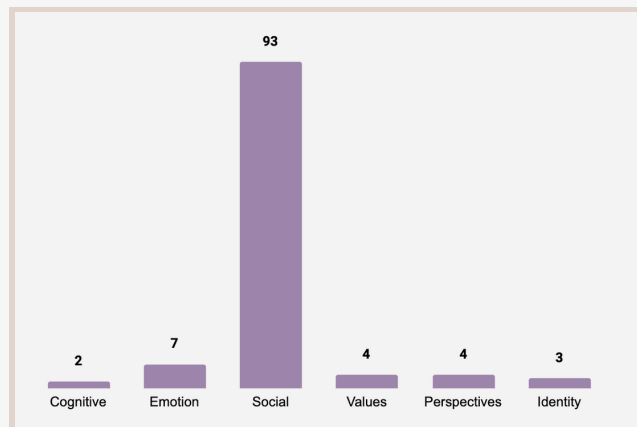
themselves before they can teach it to students. In order for teachers to effectively model reactions to stressful situations, they need to have a solid understanding of SEL skills. Some programs focus on ease of implementation and do not require any sort of training for educators. When SEL becomes a school-wide focus, student-teacher relationships improve, classroom management challenges decrease, instruction thrives, and teacher burnout diminishes (Gimbert et al., 2021). To build community and ensure educators implement SEL skills themselves, some programs require that the teachers attend training sessions before they start using the program. This allows them to become much more comfortable and confident with the material that they are teaching, and helps to implement the program with fidelity. One of the most effective ways to keep students engaged and eager to learn is to create a caring, culturally responsive community where students are known, respected, and feel safe to learn. Relationship-centered learning environments strongly support SEL and are very effective in promoting interpersonal processes and practices; a key factor in SEL (Mahoney et al., 2020).

They help create strong, meaningful and trusting relationships among students, staff, parents, and community members. In these communities, it is crucial that adults offer encouragement and provide effective modeling of equity and fairness, while also teaching respect for people of different races, cultures, ethnicities, social classes, religions, sexual orientations, genders, abilities, and other factors. In order to increase engagement and motivation in students, teachers should try to connect new learning material to students' lives, their background, and what they already know (Darling-Hammond et al., 2020). Teachers should give students plenty of opportunities to engage in challenging, active learning and to practice the skills they have been learning.


CARING SCHOOL COMMUNITY

DETAILS	
Age range	K - 8
Evidence of efficacy range	Grades 3 - 6
Number of US studies	2
Studies with low-income students	One with a socioeconomically diverse group
Cost	Kit is \$200 per classroom, no subscription, optional professional learning
Teaching Methods	Didactic instruction and discussion
Approach with Disengaged Students	Consider issues in teaching practices
International Work	Just US
Training style	In-person or virtual workshops, not required
Training time	2 days in person or half day virtual
Lesson time per week	20 - 30 min/day
Rating for the NCESE	★★☆☆

The goal of Caring School Community is to make skills as practical for students as possible, which means teaching skills in a natural way that is integrated into daily life. This requires using a mixture of SEL teaching methods and applying SEL skills in everyday scenarios like the school yard.

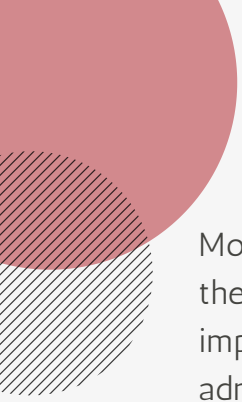


Percentage of program activities affecting skill categories



The theory behind Caring School Community comes from Richard M. Ryan's self-determination theory, which states that humans have an inherent tendency toward growth. This growth is supported by three factors: autonomy, competence, and relatedness, factors with Caring School Community focuses on. To learn about Caring School Community, we talked to Peter Brunn, a key member of the program's team, giving us insights on these program values. CSC puts relationships at the center of the work, since it is foundational to improving SEL, especially in those students who have experienced trauma. In pursuit of relatedness, one goal of the program is to ensure that students feel safe and connected to their peers. This is achieved through a number of activities, such as morning circles, class setting changes, home activities, and whole school activities, but it is particularly present in the cross-age buddies program. In this system, younger students are paired up with older students to complete activities, which occur once or twice a month. Both age groups gather beforehand to prepare for meeting with their buddies, discussing goals and positive peer interactions. During the activity, paired buddies help each other through an assignment while gaining confidence with social interactions. The activity is followed by a reflection period, allowing students to think about how they went about achieving their goals, and how they can do so more effectively in the future. Since the activities are not academic, it gives older students a chance to feel like a mentor even if they're struggling academically and it gives younger students a chance to advocate for themselves (P. Brunn, personal communication, November 22, 2021).

One belief behind Caring School Community is that disengagement stems from the way a teacher teaches rather than from the students themselves. There is no easy solution to fixing this, but the two pillars of change are the class atmosphere and the teacher's teaching style. As such, Caring School Community has teachers look inward before they try to "fix" students. Caring School Community works a lot with early literacy programs and tends to produce strong results in improving literacy. They recommend that teams implementing Caring School Community at schools stay in close communication with teams that make decisions on academic curriculum. The program does have some formative assessments to help teachers adjust their instruction to student needs, but they prefer not to quantify student growth overall through assessments, since SEL skills are never really "mastered" (P. Brunn, personal communication, November 22, 2021).



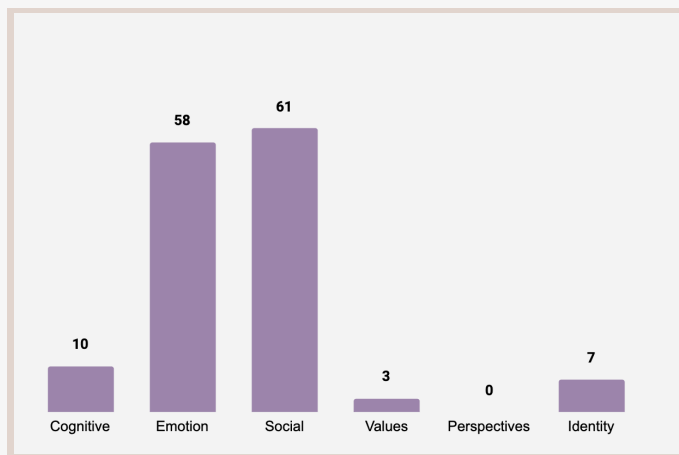
Most of the training is working with school administrators to give them the tools they need to best support teachers during Caring School Community implementation. This approach is similar to Train the Trainer, since the administrators get trained and then, in turn, help teachers use the program. The goal of the program is to make the training threshold for teachers as low as possible because they are already so overloaded with work. To accomplish this, Caring School Community uses an educative curriculum that explicitly teaches teachers about core SEL topics as they teach them. The academic side of Caring School Community's approach is usually mentioned in training, but only elaborated on during follow up consultations. When a school or district begins using Caring School Community, they take on a significant commitment, as the program requires explicit integration into the classroom, home, and school at large. Those that use the program pay an initial cost of about \$200 per classroom for teacher kits. Additional professional learning is about \$2,800 per day for in-person training and much less for virtual. There are no recurring costs because the creators of Caring School Community want it to be as accessible as possible (P. Brunn, personal communication, November 22, 2021).

CONSCIOUS DISCIPLINE

DETAILS	
Age range	PreK-5
Evidence of efficacy range	PreK
Number of US studies	5
Studies with low-income students	One with 69% of families being low income
Cost	Free resources, site license is \$779 - \$5,500 depending on the number of users
Teaching Methods	Songs and virtual displays
Approach with Disengaged Students	Smaller group interventions, one-on-one connections
International Work	Used in over 47 countries, including Australia
Training style	10-session self-paced online course, multi-day professional development (available over Zoom), on-site events
Training time	Self-paced, 10 sessions
Lesson time per week	Integrated with the rest of the day
Rating for the NCESE	★★☆☆

Conscious Discipline can be implemented through the end of high school, but it is geared toward students from birth to fifth grade. To learn more about Conscious Discipline, we talked to Elizabeth Montero-Cefalo, a Master Instructor of the program. In Conscious Discipline, they put connection at the core of the program,


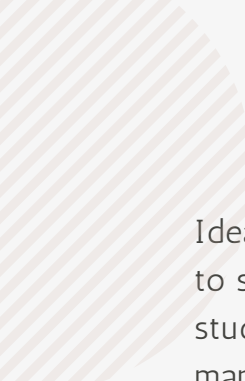
with the belief that more connection leads to more learning and engagement. Since students are more likely to connect when they feel safe, a feeling of safety in the classroom is a large concern, one that is answered through instituting routines and predictability. Controlling the attitude of the teacher also helps bring about



Percentage of program activities affecting skill categories

calm and comfort in the classroom, as teacher state regulates student state. Modeling is a large part of this teacher control, as teachers show students how stressful situations ought to be handled. Conscious Discipline focuses on seven powers that adults can develop to best teach children. These are the powers of perception, unity, attention, free will, acceptance, love, and intention. These powers inform seven skills of discipline: composure, encouragement, assertiveness, choices, empathy, positive intent, and consequences (E. Montero-Cefalo, personal communication, November 22, 2021).


Conscious discipline has a lot of tier one interventions that build community through activities such as offering students jobs in the classroom. For students in tier two, teachers can do smaller group interventions and work on social skills in a natural way by weaving it into the academic day. Tier three students require much more intentional one-to-one connection. Oftentimes, tier three students receive harsher punishments as they act out, with consequences such as having privileges taken away. In reality, these students need to feel more connected to the classroom instead of being cut off as punishment, and students' deeper issues need to be addressed. As such, Conscious Discipline focuses on equity in the classroom and especially in disciplinary actions. As the program builds a school family, focus shifts from "What's in it for me?" to "How can I help others in the community?" Physical and routine-based structures help reinforce this idea of community, such as the wish well board, which allows students to express positive thoughts for students who are struggling, and a job board, which gives every student in the classroom their own task to complete. Conscious Discipline looks to childhood outcomes like forming routines and forming connections with adults to determine efficacy, as well as whether a student is developing relationships with their peers (E. Montero-Cefalo, personal communication, November 22, 2021).



Ideally, Conscious Discipline wants to train a school's entire staff, from janitorial staff to special education teachers. It is impossible to solidify a healthy school culture if students see that adults are not getting along in their personal interactions. There are many training options, including multi-day professional development, a longer on-site event, and an e-course. Most of Conscious Discipline's training is in person. There are seven master-level instructors that train nationally and internationally and about 100 certified instructors, hand-picked people who have worked with the program for a long time (E. Montero-Cefalo, personal communication, November 22, 2021).

"If children feel safe and connected, then they are going to thrive, they are going to learn, they're going to develop the social skills that we want them to also have" - Elizabeth Montero-Cefalo

Conscious Discipline has a variety of program offerings for schools of different budgets, as they do not want money to be the reason someone cannot use the program. On the cheapest end, the program provides a number of free resources such as podcasts, webinars, and printables. For other program elements, a professional development team creates an implementation plan for schools based on their budget. There may or may not be recurring costs for professional development or consultation, depending on the resources available for implementing Conscious Discipline (E. Montero-Cefalo, personal communication, November 22, 2021).



THE INCREDIBLE YEARS

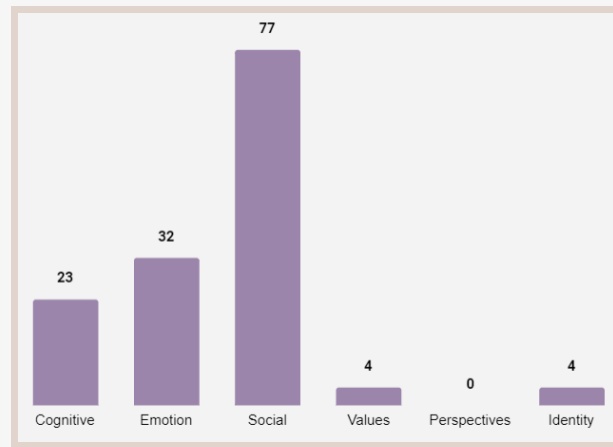
DETAILS	
Age range	Ages 0-12
Evidence of efficacy range	PreK
Number of US studies	5,
Studies with low-income students	One with 69% of families being low income
Cost	Single online training is \$775, \$6,850 for a workshop, \$1,520 for one set of curriculum, I
Teaching Methods	Music and visual displays
Approach with Disengaged Students	Pull out program
International Work	Used in over 20 countries, including Australia
Training style	Self-Training before implementation, then onsite training by certified trainer, TCM has Train the Trainer
Training time	3 days onsite training after self-training, online option
Lesson time per week	2-3 lessons/week, 20-30 min/lesson
Rating for the NCESE	★☆☆☆

To learn more about the Incredible Years programs, we talked to their Director of Operations, Jamila Reid. The focus of our research was mainly on two of the programs offered by Incredible Years that could be useful to the NCESE: the Classroom Dinosaur program and the Teacher Classroom Management program. The Classroom Dinosaur



program is further divided into a general curriculum used with all students in the classroom and a more intensive program for select students who need extra support (J. Reid, personal communication, November 11, 2021).

The general Classroom Dinosaur program involves lots of imaginary play, using child-sized puppets as





Percentage of program activities affecting skill categories

a conduit for teaching SEL lessons, along with teacher guided roleplays and videos where the puppet characters further model SE skills. Children are guided in discussing and practicing the skills themselves by teachers. The Classroom Dinosaur program offers lesson plans for three to eight year olds, with three program levels that each have about 60 lesson plans for a year. To implement the program with fidelity, a teacher needs to do at least 45 of these plans. Lessons take place one to three times a week and each lesson is a circle time, 10-20 minutes long, with a small group activity afterward. It is recommended that the teacher is the one that runs the program so they can continue to implement SE skills throughout the day. The Classroom Dinosaur Program also recognizes the importance of parent involvement in a child's education, and therefore engages parents with homework assignments and letters home (J. Reid, personal communication, November 11, 2021).


The provider does not control assessment of SE growth, instead letting schools decide how the program should be assessed and offering recommendations for assessment where desired (J. Reid, personal communication, November 11, 2021).

The more intensive version of the Classroom Dinosaur program is a treatment program of up to six students monitored by two therapists or teachers trained in mental health. Students meet two hours a week and experience the same types of lessons and activities as in the normal program, but with a more intense therapeutic focus. Each student is given an individual progress plan in this program. This program delves into mental health topics more explicitly than the main program because many of the students in the more intensive group struggle with significant mental health issues (J. Reid, personal communication, November 11, 2021).



The other main program offered by the Incredible Years is their Teacher Classroom Management (TCM) program. Unlike the Classroom Dinosaur Program, the TCM program is offered in a Train the Trainer format, where a few strong leaders at a school are trained as instructors before training other teachers at their school. The initial training spans three days in person or five three-hour sessions online. The trained staff members then provide teachers with 36 hours of training spread across six full days or twelve half days over a school year. Although the time commitment is high, teachers have found the program to be very useful. The TCM program can be used on its own or as a precursor to the Dinosaur Classroom program, if a group of teachers doesn't have strong enough SEL skills or control of the classroom to implement the program with fidelity. In the TCM program, teachers learn how to improve their teaching behaviors, better model SE skills, and intervene in aggressive situations without using harsh punishment (J. Reid, personal communication, November 11, 2021).

Students improve most on emotional regulation, emotional literacy, number of positive problem solving strategies, and proportion of positive to negative options for interaction. The program does not show evidence toward directly affecting academic skills, but it does produce a more positive classroom environment. The Classroom Dinosaur program does not see as many positive effects when it cannot be implemented with fidelity. It is labor-intensive and requires that teachers have solid teaching skills at the outset. Whole countries and states have been able to implement the program with fidelity for many years, so it is possible to implement on a larger scale, but resources need to be set aside for ongoing consultation and training. In-person and virtual training have very similar satisfaction ratings, and although some instruction could be lost by doing the training online, attendance is higher and online training allows the program to serve communities they could not serve otherwise (J. Reid, personal communication, November 11, 2021).

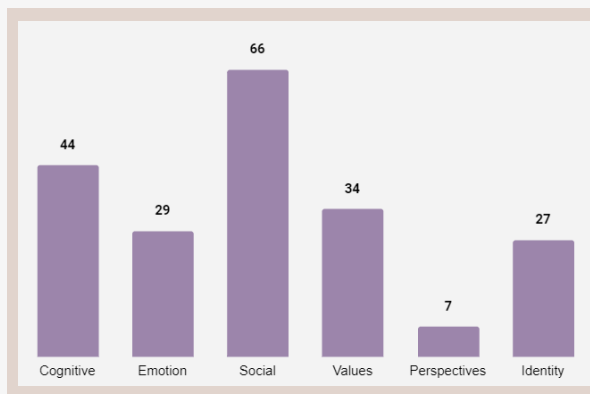


As for price, the Classroom Dina program is most expensive because each teacher needs training and physical resources, such as the puppets and materials for activities. Online training for one person is about \$775, and an online workshop costs \$6,850. The biggest costs are upfront, but there should be an ongoing budget for consultation. Teachers can be accredited in the program and supplementary videos can be accessed through an online streaming subscription (J. Reid, personal communication, November 11, 2021).


LIONS QUEST: SKILLS FOR GROWING

DETAILS	
Age range	PreK - 5
Evidence of efficacy range	Grades 1 - 4
Number of US studies	1
Studies with low-income students	One with 68 - 75% low-income students
Cost	\$2,700 for one day workshop, \$100-\$200 per teacher for 5 years access of online content
Teaching Methods	Discussion and visual display
Approach with Disengaged Students	Address different learning styles, not much
International Work	Used in over 100 countries, including Australia
Training style	In-person or Zoom workshops
Training time	Two days in person, half day over Zoom
Lesson time per week	1 lesson/week, 30 / 40 minutes/lesson
Rating for the NCESE	★☆☆☆

Lions Quest has been around for over 30 years, even before the SEL framework was officially articulated. This universal intervention program teaches SEL to all levels of students through a series of lessons and a particular focus toward preventing substance abuse.



Percentage of program activities affecting skill categories




"How is the staff working together as a peer group, and how are all of the adults in the school, from the principal down to the person sweeping the floor, all unified using common language and strategies to support student social emotional growth?"
- Matthew Kiefer

We spoke to Matthew Kiefer to learn more about the program. Lions Quest is meant to be taught on a weekly basis, providing enough content for one 30-45 minute lesson a week. Ideally, teachers start the lesson by modeling SEL behaviors using the curriculum then guide students in practicing those behaviors. Class activities are hands-on to keep students' attention (M. Kiefer, personal communication, November 10, 2021).



Assessment of how much students have improved from Lions Quest is left up to schools, to tailor according to their desires for the program. Schools may track SEL competency, school climate, prevention of substance abuse, or other data to determine program efficacy. Overall, Lions Quest is most effective at producing positive results in school climate.

Common positive effects seen as a result of the program include better interactions between students and their peers and teachers, behavioral improvements, and improved self-confidence. Lions Quest is often used as a means to promote prosocial behaviors, improve general mental health, and has even been used as an alternative to juvenile detention (M. Kiefer, personal communication, November 10, 2021).

Lions Quest also offers optional training, which they strongly recommend the schools complete before their curriculum is implemented. They hold one to two day in-person workshops or half day Zoom workshops. The first portion of these workshops focuses on the basics of SEL, acknowledging many teachers are still unfamiliar with its basic concepts. This portion of the workshop has become shorter over time as SEL becomes more popular. The second portion of the workshop is dedicated to exploring curriculum materials and allowing teachers to begin modeling SE skills and teaching Lions Quest lessons. One focus is supporting adult SEL and helping staff work together as a peer group, developing unified approaches to supporting students' social and emotional growth. Some schools have all the educators in the school get trained, but that is not too common; the average is to have 15-17 people trained, for



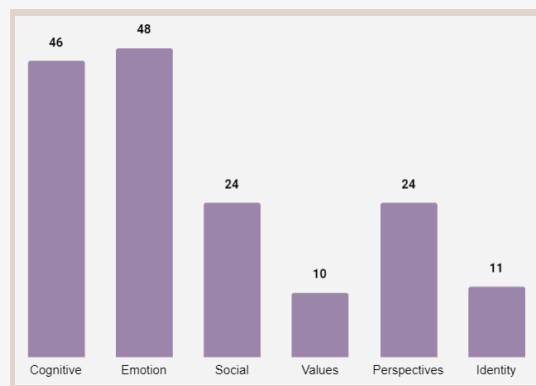
example, all teachers in a range of grades. In US prices, it costs \$2,700 to do a one day workshop or half that price to do half a day online. Five year Licenses for online access to the curriculum range from \$100-\$200 per teacher, depending on the quantity bought (M. Kiefer, personal communication, November 10, 2021). Despite a large evidence base showing positive results in improving SE scores, Lions Quest does face some implementation issues. Although the ideal curriculum is to have 30-45 minute long lessons once a week, schools often don't allocate enough time to fit the entire lesson. This can result in the teacher modeling the SE skill, but not providing sufficient time for students to practice and internalize the skill. Lions Quest is currently working to address this by moving to shorter lessons that are spread throughout the week. Lions Quest has received positive feedback from students who say that it gives them the chance to talk about issues that affect them and helps them feel more connected to their peers. One complaint across grade levels, however, is that the lessons are not age appropriate, with content not being mature enough for the grades it's intended for. Another issue is that lessons end tidily without further follow up. A lesson might be taking a stance on a particular behavior, for example, "Bullying is bad", but not provide sufficient resources or extra reflection to help the lesson achieve its goal (M. Kiefer, personal communication, November 10, 2021).




MINDUP

DETAILS	
Age range	PreK - 8
Evidence of efficacy range	Grades 4 - 7
Number of US studies	2
Studies with low -income students	One with 72% of students being low income
Cost	Yearly subscription, \$120, 30 memberships + training is \$2,500, Train the Trainer is \$1,500
Teaching Methods	Discussion and didactic instruction
Approach with Disengaged Students	Treat with tier 1
International Work	Used in 12 countries, including Australia
Training style	Initial live session with follow -up asynchronous
Training time	2- 4 sessions throughout the year 90 minute live session, followup sessions
Lesson time per week	40 min/lesson, over the course of 2-3 weeks
Rating for the NCESE	★★★★

MindUP is grounded in the idea that teaching SEL should start with a foundation of what SEL is scientifically, which requires learning about the brain. When students know more about how their brains work, they are better able to understand why they feel the way they do when their emotional state is heightened. While conducting research on the program, we were given the opportunity to talk to a



Percentage of program activities affecting skill categories



MindUP representative, Dido Balla and learn more. He explained to us that the core pillars of the program are neuroscience, mindful awareness, positive psychology, and SEL (D. Balla, personal communication, December 1, 2021).

Through MindUP, students learn how to identify their emotional triggers and come up with strategies for dealing with those situations. One way this appears in the classroom is with a Brain Break, a period of 30 seconds to 3 minutes of calming activities in the classroom. Often this break involves a short meditation, which is meant to disrupt the brain's inherent inclination to look for the negative in situations. This moment can include breathing, chimes, and calming toys, and is most effective before stressful activities like tests and presentations (D. Balla, personal communication, December 1, 2021).

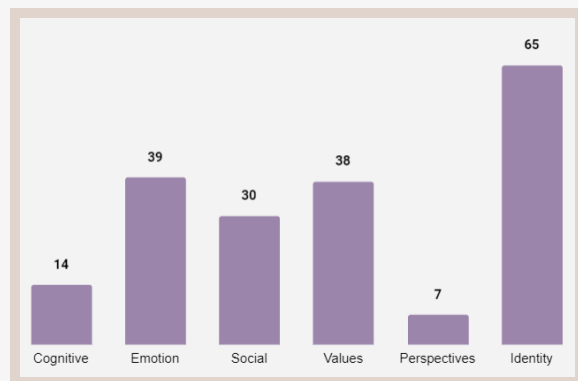
Primarily intended as a tier 1 intervention program, MindUP is committed to supporting all students in understanding their emotions. The first step in the program is to create a caring and safe community where students can talk about issues that keep them from engaging effectively. Teachers and students who use MindUP mention that it makes them feel more calm and present. Overall, MindUP has been shown to increase prosocial behavior, self-regulation, and academic achievement (D. Balla, personal communication, December 1, 2021).

MindUP training is usually for teachers and administrators, but schools are encouraged to bring all employees to create a more cohesive community of support for students. In training, teachers are given exercises to reflect on and gain access to the curriculum afterward. There are also portions of the training dedicated to giving teachers SEL and mindfulness tools to support their own wellbeing and self-care. Before COVID, training took two full days, but the most popular option now is a 90 minute live session with follow-up asynchronous training. The training can be done as two to four sessions throughout the school year, with one 90 minutes and three hour-long sessions. There is an option for additional coaching calls after the initial training. For \$2,500, 30 teachers can get a 90 minute info session plus membership with MindUP's online platform for a year, with multiple sessions costing an extra \$500 per session. MindUP also offers a Train the Trainer approach, where a school district applies for a trainer with SEL and MindUP experience to be approved as a MindUP trainer. Once approved, someone can provide training to their entire district. The goal with MindUP's Train the Trainer program is to avoid traveling around the world, instead developing trainers who are local and can continue to support their communities (D. Balla, personal communication, December 1, 2021).

POSITIVE ACTION

DETAILS	
Age range	PreK - 12
Evidence of efficacy range	Grades 1 - 5
Number of US studies	13
Studies with low-income students	7 worked with low income students
Cost	Kit is \$400 - 450 per classroom, additional kits are \$20 - 500, refresher kits are \$150 each
Teaching Methods	Discussion and visual display
Approach with Disengaged Students	Celebrate accomplishments of students
International Work	International
Training style	No required training, offers a recommended
Training time	orientation training, can be online or onsite 3 - 4 hours online or 1 - 2 days onsite
Lesson time per week	4 lessons / week, 15 min / lesson
Rating for the NCESE	★★★★☆

Positive Action engages students through a number of strategies, including music, storytelling, role playing, reading scripts, and more. The program brings in journaling and reflective writing at the fourth grade level to help students better process their emotions. In addition to these strategies, Positive Action requires a strong presence from the teacher to build relationships with students and model SEL behaviors.



Percentage of program activities affecting skill categories

To learn about the program, we talked to Melodie Hathorne, a former English teacher who joined the Positive Action team to get a change of pace from the stress of the classroom. As a teacher, she saw the need for SEL before learning about it, as some students were mentally and emotionally disconnected and had no motivation to participate in class. Working for the last five years as a program consultant, she has worked to market the program and support its implementation (M. Hathorne, personal communication, December 2, 2021).

Positive Action is primarily a tier one intervention. The lessons are short, lasting 15-20 minutes, and are delivered up to 4 times a week at the elementary level. Lessons are reinforced with posters in the classrooms and hallways and consistent use of positive language between all members of the school community. SEL instruction is accompanied by the use of tools like the Thoughts-Actions-Feelings Circle, which teaches students that whether their thoughts are positive or negative, those thoughts will affect their actions and their feelings about themselves. Celebrating the positive things that students do is a way of improving disengagement, as disengaged students often think negatively about themselves, so recognizing small accomplishments helps boost their self-image. Overall, the goal of Positive Action is to empower all individuals and help them recognize their differences while also realizing that they are all human and can relate to each other (M. Hathorne, personal communication, December 2, 2021).

"The Positive Action philosophy: you feel good about yourself when you do positive actions, and there is a positive way to do everything" - Melodie Hathorne

Positive Action has shown numerous positive effects in students and teachers. Observationally, students have increased engagement and pro-social interactions, and from a data perspective, there has been a noticeable improvement in attendance, academic achievement, and improvements in referrals and absenteeism. In all, there are over 200 outcomes in 20 categories of improvement. Teachers have also reported that using the curriculum helped improve their mental health as they learned alongside students and that Positive Action elements have made their way into students' homes (M. Hathorne, personal communication, December 2, 2021).

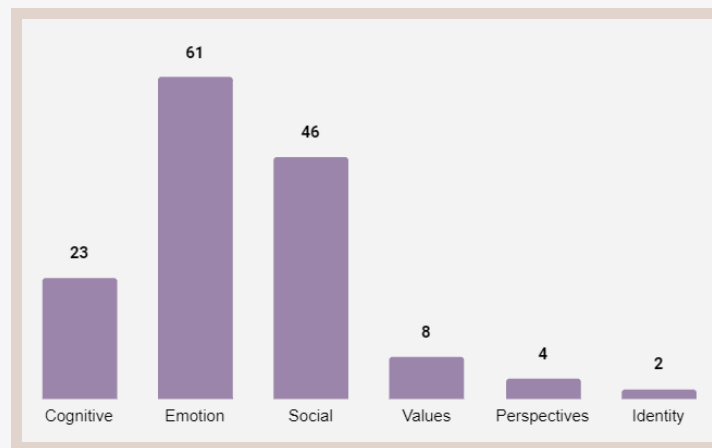
The number of staff trained in Positive Action depends on the size of implementation. The program is designed to be deliverable without training to require the least preparation from busy teachers, although training is still recommended. When the program is implemented, teachers get access to a manual with all necessary background for the program and a script for each lesson, which they can deviate from. The first year with Positive Action is the most expensive year as schools purchase curriculum kits and training; after this point, refresher kits can be used to replace consumable materials for a third of the initial cost (M. Hathorne, personal communication, December 2, 2021).

PROMOTING ALTERNATIVE THINKING STRATEGIES (PATHS)

DETAILS	
Age range	PreK - 5
Evidence of efficacy range	PreK and grades 1 - 3
Number of US studies	10
Studies with low-income students	6 worked with low income students
Cost	Kindergarten kit is \$889, first grade kit is \$679, others are \$500, refresher kits are about \$150
Teaching Methods	Discussion and didactic instruction
Approach with Disengaged Students	Tools for adapting lessons for tiers 2 and 3
International Work	International, including Australia
Training style	Two online training modules before
Training time	implementing, follow-up training available after 3 months of implementation Two 3-hour modules
Lesson time per week	2-3 lessons/week, at least 30 min/lesson
Rating for the NCESE	★★★★☆

The Promoting Alternative Thinking Strategies (PATHS) program uses a variety of strategies for teaching SEL, such as modeling, hands-on activities, and roleplays. It also rewards students for good behavior and prompts them to generate better behavior when necessary. Through our research we were able to connect with David Urbonas, who supports marketing and sales of the program and who has worked with PATHS for 20 years. 30 years of research on PATHS shows that it produces a wide range of positive outcomes. The program has produced the outcomes schools want from it,

such as conflict reduction, a decrease in class disruptions, and higher teacher productivity. PATHS is designed primarily as a tier 1 intervention, but has some extra material to assist counselors and other staff in supporting tier 2 and 3 students. The program is highly scripted, down to individual phrases and actions, to help teachers without extensive SEL experience implement the program. The lessons are designed to address the five CASEL competencies, and each grade receives 36-52 20-minute lessons over the course of a year. The amount of lessons varies across grade-level, as students' developmental needs differ as they get older. PATHS comes with its own evaluation tool that allows teachers to track student progress in behavior, attentiveness, and SEL competency (D. Urbonas, personal communication, November 18, 2021).



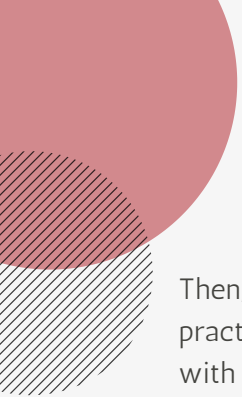
Percentage of program activities affecting skill categories

To train users, PATHS has each teacher complete an online, asynchronous training course. This course begins with a three hour introductory session and finishes with a three hour follow up a few weeks later. This training is included in the classroom implementation package, which is the only cost for a teacher to fully implement the program. Most elements of the package are reusable or reproducible, and consumable items like stickers can be purchased separately from the kit. The number of teachers who are trained varies: sometimes limited to one or two grade levels, while other times enabling an entire school system to receive the training. Training is conducted asynchronously and individually online. Notably, the program has already been used widely in Western Australia (D. Urbonas, personal communication, November 18, 2021).

THE RULER APPROACH

DETAILS	
Age range	PreK-12
Evidence of efficacy range	PreK and 5-6
Number of US studies	4
Studies with low-income students	2 worked with up to 94% low-income students
Cost	\$6,000-\$8,000 for first two years, \$1,000 subscription fee afterward
Teaching Methods	Discussion and visual display
Approach with Disengaged Students	Understanding emotions of disengaged students
International Work	International, including Australia
Training style	Train-the-Trainer, at least 3 participants from the school must complete training at Yale or the RULER Institute Online, one must be the school leader
Training time	2 days at Yale or 6 weeks online
Lesson time per week	18 units per grade, two 45-minute lessons/week
Rating for the NCESE	★★★★

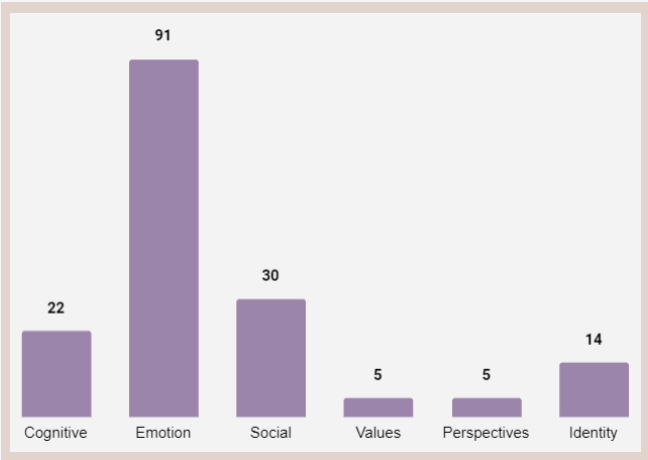
The goal of the RULER approach is to enhance emotional climates and to help adults and students become more emotionally intelligent. Thus, the RULER approach primarily focuses on building the skills of emotional intelligence and paying attention to emotions within and around yourself. To learn about the RULER Approach we talked to Nikki Elbertson, the director of content and communications at the Yale Center for Emotional Intelligence, where she has been working for almost 20 years. She oversees communications, curriculum, and staff development alongside assisting with training. Training for the RULER approach lasts six weeks.



Then, educators and school leaders who have attended training spend one to two years practicing the skills, tools, and principles of emotional intelligence before they use the curriculum with students. This includes meetings and guides to develop adult SEL, and as a result, positive effects are visible in students before the curriculum is even used. The five RULER skills are recognizing, understanding, labeling, expressing, and regulating emotions. Recognizing emotions teaches how to interpret internal cues, like tight muscles, or signs of emotions in others, like a smile or frown. Understanding emotions is about determining why someone feels the way they feel, which requires knowing the context of the emotion. Labeling takes the recognizing step and combines it with understanding to identify the specific emotion word. For example, anger and frustration look and feel similar, as they are both unpleasant and high energy, but the cause behind them is different, so when we are attempting to manage them or help someone else manage these emotions, each should be approached differently. Expressing emotions is about teaching people how to show emotions in ways that are helpful, with consideration of the context the emotion is expressed in. For example, expressing excitement in the middle of a math test is not generally helpful, but expressing that excitement with friends on the playground may help a student feel connected. Finally, regulating emotions is deciding how you want to feel and determining a strategy for getting there (N. Elbertson, personal communication, November 23, 2021).

The RULER approach uses four tools to build and practice these skills: the Charter, the Mood Meter, the Meta-Moment, and the Blueprint, which are used in sequence. The Charter is an agreement that is set as a classroom and school, addressing two questions: how do community members want to feel and how can they help each other feel that way?

Examples of actions agreed on in the Charter could be thanking people in a certain way to enhance shared feelings of gratitude or celebrating successes with each other to feel more inspired. The Mood Meter focuses on building all the skills, but particularly recognizing. It focuses on two aspects of emotion, pleasantness and energy / activation, and is based on the circumplex model of affect. It has four quadrants formed by the two axes and each quadrant pairs with sets of emotional vocabulary. These words help someone using the tool determine where



Percentage of program activities affecting skill categories

they are and whether their current position is helpful. They also consider whether they want to switch quadrants and, if so, how they will go about doing that. The Meta-Moment is focused on emotion regulation in the moment, and it follows the four steps of sensing, pausing, seeing your best self, and strategizing and acting. The last tool, the Blueprint, is about reflecting on, resolving, and restoring communities affected by conflict. It is heavily based in restorative practices (N. Elbertson, personal communication, November 23, 2021).

The RULER approach recognizes emotions as a large factor in student disengagement. As such, adults who pay attention to emotions are able to engage their students better. One example of how RULER addresses this concept is through training teachers in mood congruent instruction, which considers the most helpful emotional atmosphere for engagement in particular class activities. For example, a brainstorming activity works best with pleasant and high energy emotions, while a lesson about a heavy historical topic might work better when students are feeling slightly less pleasant and lower in energy. (N. Elbertson, personal communication, November 23, 2021).

"It's not just handing them a curriculum. It's giving them these lessons and saying, 'There's a really important thought process that should go into how you teach the lessons, not just what you're teaching.'" - Nikki Elbertson

As student behaviors change over time, RULER can track them through a number of assessments created by the RULER team or with common measures in the field, depending on what the school wants to track. Schools that implement the RULER approach participate in an online Train the Trainer program. Each school chooses an implementation team of three to five educators that must include the school leader alongside two to four other educators or mental health professionals. The training takes six weeks, with both asynchronous and synchronous instruction offered. After this initial training, the implementation team shares what they've learned and all resources through an online platform that all other teachers in the school can access for up to two years. This initial implementation period also gives school staff access to coaching, newsletters, webinars, and RULER's online platform, which provides curriculum and training, as well as. After the first two years, schools have the option to subscribe to RULER. The initial two years of training cost \$6,000 - \$8,000 depending on the size of the implementation team and the optional subsequent subscription costs \$1,000 a year (N. Elbertson, personal communication, November 23, 2021).

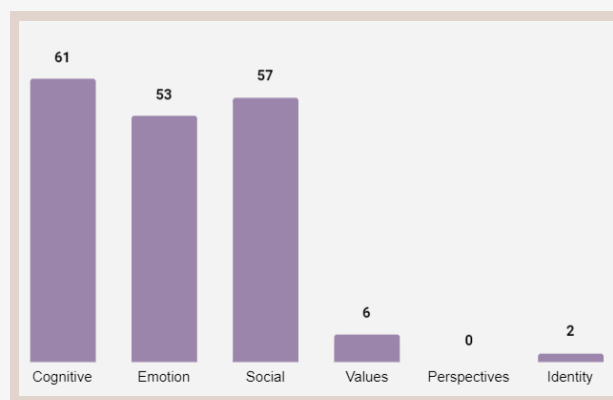
SECOND STEP ELEMENTARY

DETAILS	
Age range	K-5
Evidence of efficacy range	K-5
Number of US studies	14
Studies with low-income students	8 worked with low income students
Cost	About \$459 for each classroom implementation kit, can buy consumable or extra elements separately
Teaching Methods	Discussion and visual display
Approach with Disengaged Students	Treat with tier 1
International Work	Used in 12 countries, including Australia
Training style	Individual online training prior to implementing, offers a Leadership Institute for district-wide implementation
Training time	1 hour online training
Lesson time per week	22-25 weeks; 1 lesson and 4 follow-through activities/week; 20-45 min/lesson and 5-10 min/follow-through activity
Rating for the NCESE	★★★★☆

Second Step is an SEL intervention that reaches a wide range of people, with dedicated programs for early learners, elementary schoolers, middle schoolers, and teachers. We looked at the Second Step Elementary program in particular since most NCESE schools are primary schools.

Second Step is traditionally used in the classroom, where teachers deliver lessons that are 20–30 minutes long. Lessons involve puppets who model the skills students are learning about, which include social, cognitive, and emotional skills. Accompanying songs and videos are accessible through Second Step’s streaming service, and students engage in activities like Brain Builder games that employ particular sets of rules and allow students to get active, engaging their bodies and minds. The elementary program can also be implemented through online resources with lessons similar to the in-person curriculum. These lessons are still teacher-led and run the same length, but include online interactive activities for students and are updated as new approaches to teaching SEL become best practice. The elementary program has optional add-on curriculum units for bullying prevention and child protection, which works to protect students from abuse. Second Step also has resources for families to further reinforce SEL and to empower children with knowledge about abuse and how to report it. By engaging families and teachers, Second Step works with all of the systems that surround a student (T. Kim, personal communication, December 1, 2021).

Second Step is intentionally designed to be engaging, and its creators continue to collect data to improve program content. The program has seen strong improvements in SEL competencies and student behavior. Second Step is meant to be used without rigorous training, but online training is still available in the form of three asynchronous video modules, assessments, and strategies. Reusable classroom kits can be purchased for \$410–460 per kit, depending on grade, with replacement items available. A subscription to the online curriculum costs \$2,259 to \$3,103 a year depending on the number of students enrolled, with a decreased rate for multi-year subscriptions (T. Kim, personal communication, December 1, 2021).

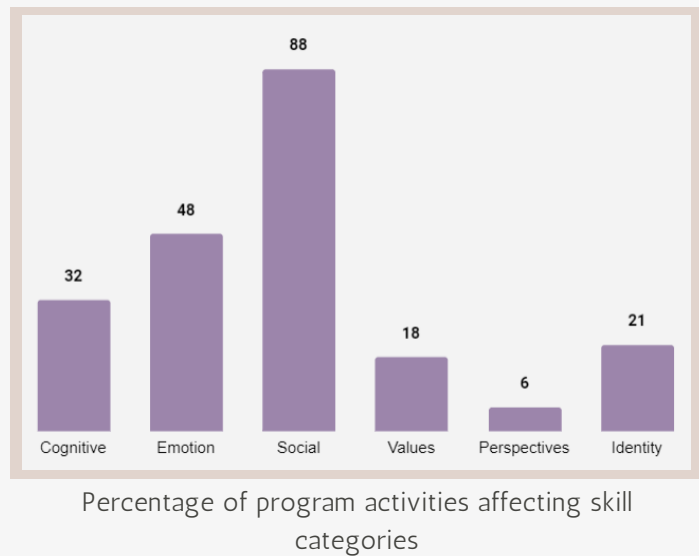


Percentage of program activities affecting skill categories

THE SOCIAL SKILLS IMPROVEMENT SYSTEM

DETAILS	
Age range	PreK - 8
Evidence of efficacy range	Grade 1 - 2
Number of US studies	4
Studies with low-income students	One with 69.9% of students from low income
Cost	\$140-189 a year per classroom, PIP costs \$900 a year; for assessments, PIP is \$1,800 and SSIS SEL is \$2,100 a year, plus \$500 for mental health
Teaching Methods	Discussion and SEL tools
Approach with Disengaged Students	Treat with tier 1
International Work	International, including Australia
Training style	Relies on self-training, recommends reviewing the SSIS SEL CIP Manual, offers online training webinars and training briefs
Training time	N/A
Lesson time per week	90 lessons in 30 units, 3 lessons/week, 20-30 min/lesson
Rating for the NCESE	★★☆☆


We spoke to Stephen Elliott, a co-founder of the Social Skills Improvement System (SSIS) program, to learn more about his experience and what makes SSIS unique. We were surprised to find that Dr. Elliot has collaborated closely with Australian educators and that his program has been implemented successfully for a few years in a school close to Broadmeadows. SSIS sprang



Wout of his early research, which involved assessment systems that focused on children's' social and emotional strengths rather than their weaknesses. In working with students in juvenile detention, he found that academic achievement seemed to be linked with social and emotional skills, which sparked his interest in education and SEL. One thing Dr. Elliot pointed out to us is the amount of time students spend learning. He mentioned that Australian students only spend 14.5% of their time in school, and even the best students only spend 9.5% of their overall time engaged in school. This fact counteracts the concern that SEL programs take away vital class time from other subjects, since, in the long run, these programs increase the amount of time students are engaged. This idea is supported by the increase in SEL competencies, academic achievement, and engagement, in addition to the decrease in problem behaviors, that SSIS brings about (S. Elliott, personal communication, November 4, 2021).

Dr. Elliott highlighted the importance of measuring exactly what you want to teach, which is the core of his ungraded, assessment-based SEL program. SSIS emphasizes maintaining integrity of implementation, having students actively practice skills and breaking complex concepts down into concrete, teachable skills. SSIS also gives schools the ability to respond to students' current environment by creating new materials and role plays within the curriculum framework while engaging students through pre-existing roleplays, songs, and more.

"[Struggling students] need to learn how to manage stress,... to recognize their needs and the sources of support all around them, and how to seek out and utilize support that exists" - Stephen Elliott




Schools appear to be very happy with the program, as there have been 100% renewals for the program from organizations who had tested it out (S. Elliott, personal communication, November 4, 2021). One particularly appealing aspect of SSIS is its time efficiency. Only 1.5% of a school year's instructional time is needed to teach 10 SEL skills, as each skill takes 90 minutes to teach. Additionally, SSIS has offerings for a wide age range of students, from 3 to 18, and has a dedicated version of the program called the SSIS SEL Preschool Instructional Program (PIP) that is geared toward preschoolers in particular. To implement SSIS, schools can purchase bundles of curriculum and online training for \$140-189 a year, depending on the quantity purchased. The PIP program costs \$900 a year per school. Assessment tools are purchased separately. The PIP assessment costs \$1,800 and the SSIS SEL assessment costs \$2,100 per year, with an option to add mental health assessments for an additional \$500 (S. Elliott, personal communication, November 4, 2021).

STUDENT SUCCESS SKILLS

DETAILS	
Age range	PreK-12
Evidence of efficacy range	Grades 4-5 and 7-8
Number of US studies	23
Studies with low-income students	most studies worked with low-income students
Cost	About \$100 manual per classroom, optional training
Teaching Methods	Discussion and didactic instruction
Approach with Disengaged Students	Make it personal and emphasize that learning SEL skills is in student's best interest
International Work	Used in 14 countries
Training style	No required training, optional training available
Training time	N/A
Lesson time per week	Five sessions, 45 minutes long, Spaced a week apart
Rating for the NCESE	★★★★☆

To learn about Student Success Skills (SSS), we talked to Greg Brigman, a Professor of Counselor Education at Florida Atlantic University. Student Success Skills is very student centered and personalized, as students track their success with small goals that they set for themselves. This is an element of the program's goal to provide hooks for student motivation; showing students that adopting better social and emotional practices will help them feel better and perform better in the activities they care about. SSS is usually



delivered by a counselor over a five week period, with one 30 - 45 minute session occurring a week. The presenter shows students how a particular skill works and then students try it out and set goals around it. While the program is powerpoint - driven, "Brain Gym" sessions are incorporated into lessons to give students a break and allow them to benefit from physical activity.

Another main element is student self - assessment of their progress with a Looking Good, Feeling Good form, which tracks changes in nutrition, fun, exercise, social support, and rest, along with their effect on energy and mood. Students also share their weekly goals and successes with their peers, and support each other in their goals. SSS lessons are short, but material from the lessons is referenced and incorporated throughout the school day, reinforcing the material in students' minds. Over the course of around 30 studies, SSS has been shown to create significant differences in cognitive learning, social, self management, and academic skills. About 85 - 90% of students exposed to the program show improvement in these according to studies performed by the organization (G. Brigman, personal communication, December 1, 2021).

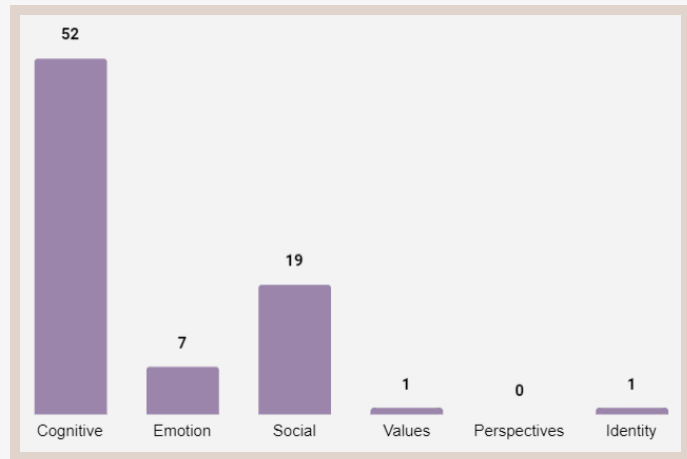
Student Success Skills is designed to be usable without training to cut down on cost and preparation time, although training is considered beneficial. SSS offers a Train the Trainer approach where they partner with school districts and train a few experienced leaders who proceed to train others in the district. To implement Train the Trainer with the most fidelity, SSS prefers to see some videos of a potential trainer teaching before they can become a trainer for others in the school. Teachers can be trained in chunks of a few grades because curriculum is similar within grade bands. While training is a larger cost, the manual for each grade only costs a little under \$100 and the curriculum can be used from year to year. The program uses no consumables by design to cut down on cost and prevent the need for purchasing refresher kits each year. Because of COVID - 19, they also created an online training platform containing modules, synchronous videos, and other useful content for educators. Student Success Skills does not usually hold follow up training or consultation for the program (G. Brigman, personal communication, December 1, 2021).

TOOLS OF THE MIND

DETAILS	
Age range	PreK-K
Evidence of efficacy range	PreK - K
Number of US studies	14
Studies with low-income students	9 worked with low income students
Cost	About \$3,500 per classroom for apps and data analysis plus \$600 classroom kit, subscription fee
Teaching Methods	Discussion and visual display
Approach with Disengaged Students	Study buddy groups have students keep each other from disengagement
International Work	International
Training style	Require one year of Core Training
Training time	Five full days of workshops
Lesson time per week	70 PreK and 87 K activities delivered through the day, every day, throughout the year
Rating for the NCESE	★☆☆☆

To learn more about Tools of the Mind, we talked to Deborah Leong, an executive director of the program. Tools of the Mind is an especially interactive SEL program that puts roleplay at the forefront of not just SEL, but education as a whole. The classroom experience centers around stories from the Magic Tree House series, with each curriculum subject following themes from a book setting that is changed periodically. Examples of settings include ancient Egypt and prehistoric times. Teachers will even

dress up and use props associated with the theme; students are often involved in creating these props. The use of these stories and supplemental materials highly engages students and creates a community of students who respect each other and are excited to learn. Tools of the Mind also focuses on developing executive functions to enable more effective teaching of social




Percentage of program activities affecting skill categories

and emotional skills. To develop executive functions teachers can address situations that may be stressful before they become stressful, for example, by discussing sharing before students go and play (D. Leong, personal communication, November 29, 2021).

Tools of the Mind supports community within the classroom through the use of study buddy groups. These groups often pair students who are doing well and students who are struggling in groups of four. Study buddy groups change each week so that every student is grouped with every other student in the class at some point. The group meets for a learning conference at the end of the week, where students discuss the records of what they achieved over the week and set goals for the next week. Study buddy groups work as a problem solving unit that promotes positivity within the group and helps address students' particular weaknesses as students support each other through learning strategies. Tools of the Mind also develops a positive attitude toward making mistakes by having teachers model making mistakes on purpose and reinforcing the idea that making mistakes is a part of the learning process (D. Leong, personal communication, November 29, 2021).

Another major aspect of Tools is its extensive use of technology. The program provides a suite of apps that students, parents, teachers, and administrators use to collect learning data and synthesize it into useful summaries. The student app helps students walk through the process of reading and provides tools that assist in understanding words. Students receive different difficulty levels of reading through the app, but they are not notified as to which level they read at, to avoid segregation of students by ability. There is a similar student app for writing. This strategy has been very successful in helping students reach the reading milestones for their grade. The teacher app shows teachers



the manual that goes with Tools as well as video instruction on particular techniques. The app also links teachers to implementation support from the Tools team, so they can describe a problem that comes up and receive help with it. Teachers also receive teaching challenges through the app to help them develop their teaching skills with the Tools curriculum. The suite also includes a parent app that allows parents to communicate over text with their children's teachers. The parent app has been especially instrumental as classrooms have moved online due to COVID-19, since parents can support their students in completing school activities through the app. Data from student work on the apps is summarized for teachers, and teacher data on fidelity and issues is sent to administrators alongside student data, and is updated daily. These apps utilize the power of technology to individualize student lessons and collect large amounts of data easily and precisely (D. Leong, personal communication, November 29, 2021).

"In my experience, the best way to teach social-emotional learning is to actually embed it in everything that happens in the classroom, so you try to create this community of children as learners where they learn to respect and treat each other in a positive way" - Deborah Leong

When Tools of the Mind is implemented in a school, every teacher is usually trained (Deborah Leong, personal communication, November 29, 2021). Training takes two years and occurs through multiple virtual workshops throughout the year. Training gives teachers the tools to organize a class and run activities at multiple skill levels simultaneously, since students need material of different difficulty levels.

The final price for each classroom that implements Tools of the Mind comes out to about \$3,500 for the apps and implementation support plus \$600 for the classroom kit of physical materials. After the first year the kit does not need to be purchased again, but there is a subscription price to keep accessing Tools' data analysis abilities. Staff are usually certified after two years of training (D. Leong, personal communication, November 29, 2021).

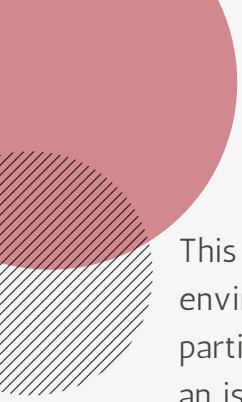
CONCLUSION

The purpose of this project was to find SEL programs that suit the needs of Broadmeadows schools affiliated with the NCESE. Throughout the findings section, we gave programs a rating from one to four stars on how well we believe they would suit NCESE schools. We would like to acknowledge that we only had seven weeks to research these programs and were not able to talk to the schools that use them, so these conclusions are our personal judgments and we hope that the information in the above program profiles can help the NCESE make additional judgements on SEL programs beyond these recommendations. In this section we will walk through SEL resources in the order that we recommend them, from least recommended to most recommended.

Programs Rated One Star


Programs that are rated one star have significant barriers to implementation in Broadmeadows. To be clear, having a one star rating does not mean that we believe a program is bad overall; for example, Tools of the Mind was among the most interesting programs we researched. This rating just signifies that we do not think these programs are appropriate for the NCESE to research further. We rated Lions Quest, Tools of the Mind, and the Incredible Years with one star.

Lions Quest: Skills for Growing is a well established and widely used program that has operated for over 45 years, being founded before the SEL framework was even established. Despite this long history and a large evidence base, Lions Quest faces issues with schools allocating enough time for lessons, which they are currently reworking the curriculum to address. There are also complaints that lessons in the curriculum are not mature enough for their respective grades and that they end with too simple of a lesson. (M. Kiefer, personal communication, November 10, 2021)



This quality of the program may not be a large concern in some applications, but in an environment where students are dealing with multiple complicated issues, it is particularly unhelpful when lessons are too childish or fail to capture the complexity of an issue in students' lives. The program also has a somewhat specific focus: many of its lessons are designed to combat substance abuse and this is a major focus of the program overall, even though some of its lessons are not fully updated for current views on drugs like marijuana. Finally, it does have a Train the Trainer program, but it is primarily designed to build up the Lions Quest US trainer team, and is not often used to implement Lions Quest in a school district. Lions Quest clearly works well in certain contexts, but for these reasons we do not recommend it for the NCESE.

Another program that we rated one star is **Tools of the Mind**. Tools of the Mind is an incredibly interesting approach that integrates SEL intimately with academics and utilizes technology to effectively collect large amounts of student data. In a different context, this could be the ideal approach for SEL. However, the program comes with a very high implementation cost, both financially and in terms of human resources. Blueprints, an organization that collects information about youth development intervention programs, estimated that the first year of Tools of the Mind would cost around \$48,500 for implementation in ten Kindergarten classrooms. After the first year there is a reduction in cost because physical kits do not need to be purchased again, but the kit is not a large portion of the cost and there is still a subscription cost because of high interaction with and data analysis from the Tools of the Mind team. The Tools curriculum also affects academic subjects heavily, with weekly roleplay themes being incorporated into every aspect of the classroom. This deviates significantly from teachers' usual classroom routine, so they would have to prepare extensively for this level of integration. Since Tools is so technology heavy, each classroom is advised to have 4-8 iPads and a steady internet connection, further adding to implementation cost (Tools of the Mind, n.d.). While Tools of the Mind is an impressive program, we do not recommend it for NCESE schools because of these large implementation barriers.

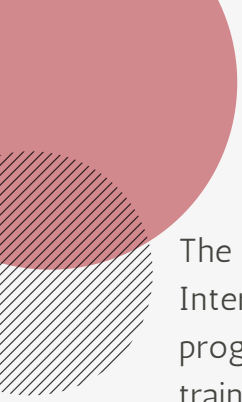


The Incredible Years offers two major programs, the Classroom Dinosaur Child Prevention Program and a Teacher Classroom Management program. To address the Teacher Classroom Management (TCM) side of Incredible Years first, while developing adult SEL is an important element in developing children's SEL skills, most approaches have some form of teacher training to this effect. The TCM program is particularly in-depth, consisting of 42 hours of workshopping, but we did not see it as significantly different enough to be used if the Classroom Dina Program is not implemented with it. The Classroom Dina Program is particularly engaging through its use of puppets and visuals and it incorporates an optional pull out program that supports particularly disengaged students (J. Reid, personal communication, November 11, 2021). Unfortunately, as with Tools of the Mind, the implementation cost appears to be significant. One study published in 2007 estimated the implementation prices for different combinations of Incredible Years interventions, and the result ranged from \$1,758 to \$3,003 per child, accounting for inflation. While this estimate is older, we still found current Incredible Years prices to be high, with one set of curriculum for a classroom costing \$1,520, or double that if the pull out program is included, alongside a number of other implementation costs (Olchowski, 2014). Given the cost of the program, we do not recommend it for use with NCESE schools.

Programs Rated Two Stars

Programs that are rated two stars are slightly better suited for use in Broadmeadows than one star programs, but still have some aspects that may make it difficult to implement in this context. We rated the Social Skills Improvement System, Caring School Community, and Conscious Discipline with two stars.


The Social Skills Improvement System (SSIS) is a well liked program that is heavily built around assessment of the SEL skills that the program teaches. SSIS puts the most emphasis on SEL assessment tools, which allows educators to keep track of students' progress as they are developing the skills. The SSIS has already been established in Australia, and has been effectively implemented into a school relatively close to Broadmeadows (S. Elliott, personal communication, November 4, 2021).



The main reason for rating this program two stars is its cost. SSIS Classroom Intervention Program, which encompasses all curriculum outside of its Preschool program, requires that each classroom purchase bundles of curriculum and online training for \$140-\$189, which is a recurring cost each year. There is an even larger cost for the assessment tools, which cost \$2,100-2,600 per year for the whole school. The fact that these costs are recurring means that they will rack up significantly over the years. If the program offered only a one time cost for their materials and assessments, we would have rated it higher.

Caring School Community is a program with a number of appealing aspects. Overall, it has a strong focus on community, with support for teachers, administrators, and all school staff in building relationships with students and handling discipline in a positive way. 20-30 minute lessons occur daily, which is unusually frequent compared to other programs we researched. Additionally, they implement a cross-age buddies system that enables older students and younger students to develop relationships, building individual student confidence and an overall sense of community (P. Brunn, personal communication, November 22, 2021). On the financial side, kits are only \$200 per classroom and require no subscription, with an option for professional learning. This is one of the cheapest costs we saw among programs and the fact that there are no recurring costs reduces cost over time drastically. We would have rated Caring School Community in the three or four star range if not for the fact that it is the only program we researched that appears to only operate in the United States. Since we do not know what sort of difficulties come with adapting a program to a different country's learning standards for the first time, we rated it two stars, although we believe it to be a strong candidate apart from this concern.

Conscious Discipline is an SEL approach that puts connection at the center of classroom activities. It is designed to modify teacher and child behavior to foster a school and classroom culture built on safety, connection, and problem-solving instead of rewards and punishments. This program is unique from the others in that it doesn't concentrate on curriculum. While there is a "Feeling Buddies" curriculum for students PreK through second grade, the majority of the program is non curricular and focuses on making school a safe community for students to learn and to thrive.



Conscious Discipline provides lots of resources and structures to help support this community, one of these being a job board that gives every student a job to do each day to give them a sense of responsibility. In order to implement Conscious Discipline with fidelity, ideally the entire school staff should be trained in SEL, although it is only required for the teachers (E. Montero-Cefalo, personal communication, November 22, 2021). This training is crucial, as teachers are almost constantly modeling behaviors for their students. The cost of this program is very dependent on the budget of the schools; Conscious Discipline can work with a very wide range of resources. Their professional development team works individually with each school to create an implementation plan based on their needs and budget. Conscious Discipline is a very unique and effective program, but we are hesitant to recommend it due to its mostly noncurricular focus, which is why it is in the two star category. We believe that achieving a well-rounded and concrete program implementation is more difficult without an explicit curriculum. Despite the rating of the program overall, we believe that some of the individual elements of the program, such as the job board or wish well board, could be useful for building community alongside other programs, and could be bought or made from scratch apart from the Conscious Discipline program.

Programs Rated Three Stars

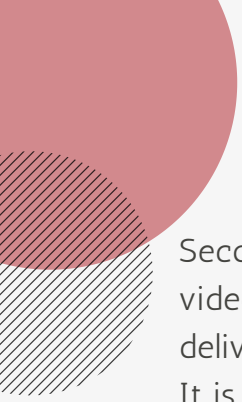
Programs that we rated three stars are all solid approaches that we believe are suitable for implementation in Broadmeadows. While we believe the recommended programs are most suitable for use with NCESE schools, these programs are on a similar level to the recommended approaches. We rated Student Success Skills, Positive Action, Second Step Elementary, and PATHS as three stars.

Student Success Skills (SSS) is a well researched and easy-to-implement SEL program. According to CASEL data, the program improves academic performance, reduces problem behaviors, improves school connectedness, improves social behaviors, and improves other SEL skills (Student Success Skills - CASEL Program Guide, n.d.). This puts it alongside Tools of the Mind and the four star programs, MindUp and the RULER approach, as having evidence of affecting the most SEL outcomes relative to other programs.

SSS is well suited to working with disengaged students as it engages them by making it clear that SEL skills benefit them personally, allowing them to improve in the things they already enjoy. SSS also has students set individualized goals and track their progress over time, giving students who are struggling an opportunity to engage with the issues they have not overcome (G. Brigman, personal communication, December 1, 2021). Since SSS is the most cost efficient program out of the ones we researched, it is especially well suited to low income schools. It achieves its price through having no consumable elements and by not requiring training, instead only selling a manual for each grade, costing just under \$100 per classroom. This program is rated three stars instead of four because it is less integrated with the school day and school as a whole than many other approaches.

Another program that we rated three stars is **Positive Action**. While implementing this program, teachers deliver 15-20 minute lessons up to four times a week, depending mostly on grade range, which is frequent compared to other programs. Positive Action does not require training because the lessons are highly scripted and contain plenty of background information. This allows busy teachers to cut down on preparation time and start teaching the curriculum regardless of their own SEL skills. The lessons incorporate lots of hands-on and interactive activities such as roleplay, music, storytelling, and plenty of group discussions to keep students engaged. (M. Hathorne, personal communication, December 2, 2021). The only cost for this program is classroom kits, which can range from \$400-\$450 depending on whether they are bought in bulk. Some items in these kits are consumables, so schools can purchase refresher kits for \$150 to replace any of those items. Overall, Positive Action is a great program with plenty of evidence that it works. The main thing keeping us from rating this program as four stars is that the curriculum materials seemed overly childish and simplistic compared to other programs.

We also rated **Second Step Elementary** three stars. This program is well researched with fourteen US studies, more than half of which worked with low income students. This gives Second Step an evidence base for each grade level it works with, which, out of the programs we researched, it only has in common with Tools of the Mind.




Second Step has lots of engaging content, such as puppets that model SEL skills and videos that provide a break from discussion, plus interactive activities that are delivered throughout the week (T. Kim, personal communication, December 1, 2021). It is already available internationally, and in Australia it is published by the company Positive Pieces Education (Positive Pieces Education | Social Emotional | Learning Australia, n.d.).

Promoting Alternative Thinking Strategies (PATHS) is a well known program with over 30 years of evidence supporting their research, including 10 in-depth studies in the United States, 6 of which dealt with low-income students. Like Second Step, PATHS is also being used in many countries. The program is already being implemented state-wide in Western Australia, so there is a well-established example of the curriculum in the country (D. Urbonas, personal communication, November 18, 2021). Like other programs, they provide a very highly scripted, step-by-step procedure for delivering lessons, which assists teachers in preparation while still giving them the option to deviate from the script. PATHS also comes with its own evaluation tool, something that we did not see with many programs. Classroom kits containing curriculum and online training range from \$500-\$900, depending on the amount you buy and the grade they are for. They tried to make as many consumable resources reproducible as possible to cut down on the cost of ordering replacements. PATHS is a very solid program and the main thing keeping it from being four stars is the price of classroom kits.

Programs Rated Four Stars

We consider MindUP and the RULER approach, the programs we rated with four stars, to be the best choices for the NCESE to investigate further for their partner schools. These programs combined many of the positive elements we saw in other programs into a single approach.

MindUP is one of the two strongest programs we researched. It combines classroom instruction, including information about how the brain works, with relaxation techniques. According to data collected by CASEL, the program reduces emotional distress, improves identity development, reduces problem behaviors, improves social behaviors, and improves other SEL skills (MindUP - CASEL Program Guide, n.d.).



MindUP is the only program we researched with a heavy focus on mindfulness. When it comes to training, they have an optional Train the Trainer approach that experienced educators can be certified in. The goal of this approach is to build a network of MindUP trainers in local communities who know how to support their community best, so this approach would work well for implementing MindUP in multiple Broadmeadows schools (D. Balla, personal communication, December 1, 2021). Beyond a one-person subscription fee of \$120, MindUP has flexible pricing, providing some free resources and scholarships for those that cannot afford the normal membership price.

Alongside MindUP, we found **the RULER Approach** to be the other strongest approach we researched. One appealing aspect of this approach is its immediate focus on adult SEL. Teachers are trained with the RULER approach, both in curriculum and SEL generally, for six months to two years before using its curriculum with students (N. Elbertson, personal communication, November 23, 2021). RULER also implements a Train the Trainer approach, ensuring that teachers have face to face implementation assistance even though the initial training for RULER is online. The RULER approach has a strong focus on affecting the entire school community, which can be seen in their requirement that the implementation team include the school's leader and the fact that all staff receive access to RULER training and curriculum, not just teachers. Another aspect of the RULER approach that stood out to us is their use of concrete tools and processes that help students understand and affect their emotional state. This is not unique among the programs, but it is built into the foundation of the RULER approach. We also feel that the RULER approach has significant and ongoing academic support informing it, since it was created at and remains partnered with the Yale Center for Emotional Intelligence. Overall, we felt that the RULER approach effectively combined support that we saw in other programs for developing community, teaching adult SEL, and giving students the tools to understand their emotions. Our main concern in recommending the program is cost, with an initial cost of \$6,000-8,000 and a yearly subscription cost of \$1,000. For schools that cannot afford the RULER approach, MindUP would be a better choice to look into as our other four star rated program.

References

- 2016 Census QuickStats: Australia. (n.d.-a). Retrieved September 19, 2021, from https://quickstats.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/036
- 2016 Census QuickStats: Broadmeadows. (n.d.-b). Retrieved September 19, 2021, from https://quickstats.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/210051242
- About the AEDC. (n.d.). Retrieved December 10, 2021, from <https://www.aedc.gov.au/about-the-aedc>
- Australia's children, Child abuse and neglect. (n.d.). Australian Institute of Health and Welfare. Retrieved September 19, 2021, from <https://www.aihw.gov.au/reports/children-youth/australias-children/contents/justice-and-safety/child-abuse-and-neglect>
- Bowers, E. P., Li, Y., Kiely, M. K., Brittan, A., Lerner, J. V., & Lerner, R. M. (2010). *The Five Cs Model of Positive Youth Development: A Longitudinal Analysis of Confirmatory Factor Structure and Measurement Invariance*. *Journal of Youth and Adolescence*, 39(7), 720–735. <https://doi.org/10.1007/s10964-010-9530-9>
- CASEL Program Guide. (n.d.). Retrieved December 19, 2021 from <https://pg.casel.org/review-programs/>
- Clyde DiPerna, J., Lei, P., Cheng, W., Hart, S. C., & Bellinger, J. (n.d.). *A cluster randomized trial of the Social Skills Improvement System-Classwide Intervention Program (SSIS-CIP) in first grade-Penn State*. Retrieved October 10, 2021, from <https://pennstate.pure.elsevier.com/en/publications/a-cluster-randomized-trial-of-the-social-skills-improvement-system>
- Damon, W. (2004). *What is Positive Youth Development?* *The ANNALS of the American Academy of Political and Social Science*, 591(1), 13–24. <https://doi.org/10.1177/0002716203260092>
- Darling-Hammond, L., Flook, L., Cook-Harvey, C., Barron, B., & Osher, D. (2020). *Implications for educational practice of the science of learning and development*. *Applied Developmental Science*, 24(2), 97–140. <https://doi.org/10.1080/10888691.2018.1537791>
- Gimbert, B. G., Miller, D., Herman, E., Breedlove, M., & Molina, C. E. (n.d.). *Social Emotional Learning in Schools: The Importance of Educator Competence*. *Journal of Research on Leadership Education*, 0(0), 19427751211014920. <https://doi.org/10.1177/19427751211014920>
- Gunn, J. (2018, July 25). *Long-term Benefits of Social- Emotional Learning for At-Risk Students | Resilient Educator*. ResilientEducator.Com. <https://resilienteducator.com/classroom-resources/sel-at-risk-students/>
- Jones, S. M., Brush, K. E., Ramirez, T., Mao, Z. X., Marenus, M., Wettje, S., Finney, K., Raisch, N., Podoloff, N., Kahn, J., Barnes, S., Stickle, L., Brion-Meisels, G., McIntyre, J., Cuartas, J., & Bailey, R. (2021). *Navigating SEL From The Inside Out; Looking Inside & Across 33 Leading SEL Programs: A Practical Resource For Schools And OST Providers* (p. 581). Harvard Graduate School of Education. <https://www.wallacefoundation.org/knowledge-center/Documents/navigating-social-and-emotional-learning-from-the-inside-out-2ed.pdf>

- Mahoney, J. L., Weissberg, R. P., Greenberg, M. T., Dusenbury, L., Jagers, R. J., Niemi, K., Schlinger, M., Schlund, J., Shriver, T. P., VanAusdal, K., & Yoder, N. (2020). *Systemic social and emotional learning: Promoting educational success for all preschool to high school students*. The American Psychologist. <https://doi.org/10.1037/amp0000701>
- McClelland, M. M., Tominey, S. L., Schmitt, S. A., & Duncan, R. (2017). *SEL interventions in early childhood*. The Future of Children, 27(1), 33–48.
- Meade, M. (2021, July 13). Jobless rate tops state. Northern. <https://northern.starweekly.com.au/news/jobless-rate-tops-state/>
- MindUP - CASEL Program Guide. (n.d.). Retrieved December 18, 2021, from <https://pg.casel.org/mindup/>
- Murray, S. A., Mitchell, J. M., Gale, T., Edwards, J. A., & Zyngier, D. (2004). Student Disengagement from Primary Schooling: A Review of Research and Practice. <https://research.monash.edu/en/publications/student-disengagement-from-primary-schooling-a-review-of-research>
- NCESE Building Blocks for Engagement. (n.d.). *Evidence for Learning*. Retrieved September 5, 2021, from <https://www.evidenceforlearning.org.au/the-toolkits/the-teaching-and-learning-toolkit/approaches-by-organisation/banksia-gardens-community-services-ncese/ncese-building-blocks-for-engagement/>
- Olchowski, A. E. (2014). *Implementing behavioral intervention components in a cost-effective manner: Analysis of the Incredible Years program*. Journal of Early and Intensive Behavior Intervention, 4(1), 284. <https://doi.org/10.1037/h0100345>
- Positive Pieces Education | Social Emotional | Learning Australia. (n.d.). Retrieved December 18, 2021, from <https://www.positivepieces.org/>
- Products – Second Step. (n.d.). Retrieved December 19, 2021, from <https://www.secondstep.org/purchase/products/>
- Ross, K. M., & Tolan, P. (2018). *Social and Emotional Learning in Adolescence: Testing the CASEL Model in a Normative Sample*. The Journal of Early Adolescence, 38(8), 1170–1199.
- Shop—SSIS CoLab. (n.d.). Retrieved December 19, 2021, from <https://ssicolab.com/shop/>
- Student Success Skills—CASEL Program Guide. (n.d.). Retrieved December 18, 2021, from <https://pg.casel.org/student-success-skills/>
- Toala, E. L., Shrady, T. A., Gunnison, M. J., & Lizotte, T. W. (2021). Flexible Learning Options for Disadvantaged Youth: An Investigation Into Alternative Education in the United States and Australia (E-project-051321-110124 24286; p. 65). Worcester Polytechnic Institute.
- Tools of the Mind. (n.d.). Blueprints for Healthy Youth Development. Retrieved December 18, 2021, from <https://www.blueprintsprograms.org/programs/1008999999/tools-of-the-mind/>



Appendix A: Initial Invitation

Subject: [PROGRAM] Interview

Hello!

We are part of a research group at Worcester Polytechnic Institute (WPI) in Worcester, Massachusetts. We are working with the Northern Centre for Excellence for School Engagement (NCESE), an Australian collective researching the roots of early disengagement, to identify successful methods of implementing social and emotional learning (SEL) into the classroom. Our goal is to provide them with findings that will help them to better educate the disadvantaged youth in Broadmeadows, Australia.

We believe you could provide valuable insight into SEL practices. As such, we would like to conduct an interview with you about [PROGRAM]. The interview would only be around 45 minutes and can take place over Zoom. All of your responses can be kept anonymous and your name will not be attached to the project unless you explicitly give us permission.

Please reach out to us if you decide to participate! You can contact us by responding to this email or by emailing gr-ncese-b21@wpi.edu. Thank you so much for your time!

Best,
Coleman Owings, Olivia Scola, Margaret Earnest
Worcester Polytechnic Institute '23



Appendix B: Consent Statement

We are students from Worcester Polytechnic Institute (WPI) who are conducting interviews about social and emotional learning programs in collaboration with the Northern Centre for Excellence in School Engagement (NCESE) in Broadmeadows, Australia. The NCESE helps elementary and middle schools in the area handle disengagement by connecting students and families with community resources. With the goal to integrate social and emotional learning into Broadmeadows schools, we are interviewing educational professionals to understand their experience with SEL and identify what programs or strategies would best benefit Broadmeadows. Our interview will last about 45 minutes. We will use information from this interview in our analysis of SEL programs that will be published to WPI's collections. If agreeable, we would like permission to attribute quotes to your organization in our report. We would also like to record this interview for our records. No one outside of our team will see this recording. You may refuse to answer any question or end the interview at any time. Do you consent to participate in this interview? (Yes or No)



Appendix C: Interview Questions

1. In your experience, what is the most effective way to teach social and emotional skills? (eg: Modeling behavior, games/group activities, individual assignments)
2. What do you look for to determine a student's social-emotional growth?
3. How does [PROGRAM] handle disengaged students?
4. Does [PROGRAM] support mental health in students and/or teachers?
5. What does [PROGRAM] look like in the classroom?
6. How have students, teachers, and schools reacted to [PROGRAM]?
7. What student behaviors do you see improve most after using [PROGRAM]?
8. What percentage of staff members / how many typically get trained in [PROGRAM]?
9. How are educators trained in [PROGRAM]? Is there a train-the-trainer program in place?
10. How long does training take? How much class time should be dedicated to [PROGRAM]?
11. Approximately how much does it cost to implement [PROGRAM] at a school?
12. Does [PROGRAM] just have a starting cost, or are there recurring costs?

Appendix D: SEL Program Comparison Matrix

This matrix is included as a supplemental file alongside the paper to make it easier to read. Data from the matrix is displayed with each SEL program profile. All data from the Number of US studies, Studies that work with low-income students, and Teaching Methods come from the study Navigating SEL from the Inside Out (Jones et al., 2021), with the exception of Student Success Skills, which is not included in the study. Data from Age range and Evidence of efficacy range comes from the CASEL SEL program guide (CASEL Program Guide, n.d.). All other information comes from program websites and interview data.

	Caring School Community	The Incredible Years	MindUP	Positive Action	Promoting Alternative Thinking Strategies (PATHS)	RULER Approach	Second Step Elementary	Social Skills Improvement System (SSIS) Classroom Intervention Program	Student Success Skills	Tools of the Mind	Lions Quest: Skills for Growing	Conscious Discipline
Age range	K-8	Ages 0-12	PreK-8	PreK-12	PreK-5	PreK-12	K-5	PreK-8	PreK-12	PreK-K	PreK-5	PreK-5
Evidence of efficacy range	Grades 3-6	PreK	Grades 4-7	Grades 1-5	PreK and grades 1-3	PreK and 5-6	K-5	Grade 1 - 2	Grades 4-5 and 7-8	PreK - K	Grades 1 - 4	PreK
Number of US studies	2	5	2	13	10	4	14	4	23	14	1	5
Studies that work with low income students	One with a socioeconomically diverse group	One with 69% of families being low income	One with 72% of students being low income	7 worked with low income students	6 worked with low income students	Two worked with schools with up to 94% low income students	8 worked with low income students	One with 69.9% of students coming from low income families	A significant portion of studies worked with low income students	9 worked with low income students	One with 68-75% low income students	One with 69% of families being low income
Cost	Kit is \$200 per classroom, no subscription, optional professional learning	Single online training is \$775, \$6,850 for a workshop, \$1,520 for one set of curriculum, large puppets are about \$450 each, small are about \$30, ongoing consultation, videos through online yearly subscription	Yearly subscription, individual membership is \$120, 30 memberships + training is \$2,500, Train the Trainer is \$1,500	Kit is \$400-450 per classroom, up to 15% discount for buying in bulk, additional specialized kits are \$20-500, refresher kits are \$150 each	Kindergarten kit is \$889, first grade kit is \$679, others are about \$500, refresher kits are about \$150	\$6,000-\$8,000 for first two years, \$1,000 subscription fee afterward	About \$459 for each classroom implementation kit, can buy consumable or extra elements separately	\$140-189 a year per classroom, PIP costs \$900 a year; for assessments PIP is \$1,800 and SSIS SEL is \$2,100 a year, plus \$500 for mental health scales	About \$100 manual per classroom, optional training	About \$3,500 per classroom for apps and data analysis plus \$600 classroom kit, subscription fee	\$2,700 to do a one day workshop, about \$100-\$200 per teacher for 5 years access to online content	Free resources, site license is \$779-\$5,500 depending on the number of users
Teaching Methods	Didactic instruction and discussion	Music and visual displays	Discussion and didactic instruction	Discussion and visual display	Discussion and didactic instruction	Discussion and visual display	Discussion and visual display	Discussion and SEL tools	Discussion and didactic instruction	Discussion and visual display	Discussion and visual display	Songs and virtual displays
Approach with disengaged students	Consider issues in teaching practices	Pull out program	Treat with tier 1	Celebrate accomplishments of students who are struggling	Provide tools for adapting lessons for tiers 2 and 3	Pay attention to emotions of disengaged students to learn how to engage them	Treat with tier 1	Treat with tier 1	Make it personal and emphasize that learning SEL skills is in student's best interest	Study buddy groups have students keep each other from disengagement	Address different learning styles, not much	Smaller group interventions, one-on-one connections
International work	Just US	Used in more than 20 countries, including Australia	Used in 12 countries, including Australia	International	International, including Australia	International, including Australia	Used in 12 countries, including Australia	International, including Australia	Used in 14 countries	International	Used in over 100 countries, including Australia	Used in over 47 countries, including Australia
Training style	In-person or virtual workshops, not required	Self-Training before implementation, then onsite training by certified trainer, TCM has Train the Trainer	Initial live session with followup asynchronous training 2-4 sessions throughout the year, Train the Trainer option	No required training, offers a recommended orientation training, can be online or onsite	Two online training modules before implementing, follow-up training available after 3 months of implementation	Train-the-Trainer, at least 3 participants from the school must complete the RULER Institute at Yale or the RULER Institute	Individual online training prior to implementing, offers a Leadership Institute for district-wide implementation	Relies on self-training, recommends reviewing the SSIS SEL CIP Manual, offers online training webinars and	No required training, optional training available	Require one year of Core Training	In-person or Zoom workshops	10-session self-paced online course, multi-day professional development (available over Zoom), on-site events

						Online, one must be the school leader		training briefs				
Training time	2 days in person or half day virtual	3 days onsite training after self-training, online option	90 minute live session, followup sessions are often 90 minutes	3-4 hours online or 1-2 days onsite	Two 3-hour modules	2 days at Yale or 6 weeks online	1 hour online training Leadership Institute is two days in June, followed by monthly meetings	N/A	N/A	Five full days of workshops over the course of the year	Two days in person, half day over Zoom	Self-paced, 10 sessions
Lesson time per week	20-30 min/day	2-3 lessons/week, 20-30 min/lesson	40 min/lesson over the course of 2-3 weeks	4 lessons/week, 15 min/lesson	2-3 lessons/week, at least 30 min/lesson	18 units per grade, two 45-minute lessons per week	22-25 weeks; 1 lesson and 4 follow-through activities/week; 20-45 min/lesson and 5-10 min/follow-through activity	90 lessons in 30 units 3 lessons/week 20-30 min/lesson	Five sessions 45 minutes long Spaced a week apart	70 PreK and 87 K activities delivered through the day, every day, throughout the year	1 lesson/week, 30/40 minutes/lesson	Integrated with the rest of the day
Rating for the NCESE	★ ★ ☆ ☆	★ ☆ ☆ ☆	★★★★	★★★★☆	★★★★☆	★★★★	★★★★☆	★★ ☆ ☆	★★★★☆	★ ☆ ☆ ☆	★ ☆ ☆ ☆	★★ ☆ ☆