



SOCIAL AND EMOTIONAL LEARNING (SEL) AND STUDENT BENEFITS:

Research Implications for the Safe Schools/Healthy Students Core Elements

Introduction

This brief shares the latest research on the effects of social and emotional learning (SEL) on students and includes strategies for implementing SEL. It explains how SEL works, elaborates on how SEL can be an integrative prevention framework that addresses the Safe Schools/Healthy Students (SS/HS) core elements, and spells out implications of the research for SS/HS grantees.

Research clearly demonstrates the significant role of SEL in promoting the healthy development and academic achievement of all students. It also shows that SEL reduces problem behaviors and emotional distress that interfere with the learning and development of some students. Research indicates that SEL programming significantly raises test scores while it lowers levels of emotional distress; disruptive behavior; and alcohol, tobacco, or other drug use. SEL is thus an effective approach for addressing the SS/HS core elements: safe learning environments and violence prevention activities; substance abuse prevention; behavioral, social, and emotional supports; mental health services; and early childhood SEL programs.

SEL is the process through which children and adults acquire the knowledge, attitudes, and skills associated with the core areas of social and emotional (SE) competency:

Self-Awareness: identifying and recognizing emotions; accurate self-perception; recognizing strengths, needs, and values; self-efficacy

Self-Management: impulse control and stress management; self-motivation and discipline; goal setting and organizational skills

Social Awareness: perspective taking; empathy; difference recognition; respect for others

Relationship Skills: communication, social engagement, and relationship building; working cooperatively; negotiation, refusal, and conflict management; help seeking and providing

Responsible Decision-making: problem identification and situation analysis; problem solving; evaluation and reflection; personal, social, and ethical responsibility

SEL programming promotes the development and use of these SE competencies in the context of creating safe and supportive school, family, and community learning environments in which children feel cared for, respected, connected to school, and engaged in learning. Many evidence-based programs are available to help schools promote the development of these competencies in students. In addition, because SE competencies are believed to be an important mechanism of action for prevention programs (i.e., students learn these skills and put them into practice), many substance abuse, violence prevention, and health promotion programs also stress the development of SE competencies.

What Does the Research Say?

Several hundred well-designed studies have documented the positive effects of SEL programming on students of diverse backgrounds, from preschool through high school, in urban, suburban, and rural settings. This research indicates that well-planned and well-implemented SEL programming can positively affect a broad range of student social, health, behavioral, and academic outcomes.^{1,2}

2008 Meta-Analysis of SEL Programs

Some of the most compelling information comes from findings of the largest, most scientifically rigorous review of research ever done on interventions that promote children’s social and emotional development.³ This review of more than 700 studies published through 2007 included school, family, and community interventions designed to promote social and emotional skills in children and adolescents between the ages of 5 and 18. This large sample of studies was divided into three main areas: studies about (a) *school-based interventions*, (b) *after-school programs*, and (c) *programs for families*. Our focus here is on results of the school-based research, which included 207 studies of programs involving 288,000 students.

In this meta-analysis (study of studies), researchers used statistical techniques to summarize the findings across all the studies and found a broad range of benefits for students:

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

It is important to note that while these SEL programs took time out of the school day, they did not detract from student academic performance. In fact, as noted above, on average, students receiving school-based SEL scored 11 percentile points higher on academic achievement tests than their peers who did not receive SEL, and they also attained higher grades. And even as grades and achievement test scores were improving, classroom behavior, feelings about self, emotional problems were improving as well.

Three other key findings from the meta-analysis have important implications for SS/SH grantees. First, students achieved significant gains across all six of the outcome areas studied only when the SEL program was well implemented. For instance, program effectiveness was compromised if staff failed to conduct certain parts of the intervention, or new staff members arrived and were insufficiently prepared to deliver the program. This finding suggests schools must invest the time and resources necessary to implement programs in a high-quality way.

Second, significant gains were only seen across these six areas when classroom teachers were the primary implementers (as opposed to outside researchers). This finding demonstrates that school staff can effectively conduct SEL programs and schools do not need to hire outside personnel for effective delivery. Using existing staff may also increase the likelihood that SEL becomes an essential and routine part of school life attended to by all staff rather than a marginal add-on provided by only a few.

Finally, only programs and interventions characterized as “S.A.F.E.” achieved significant gains across all six outcome areas. S.A.F.E. programs and interventions:

- Use a **Sequenced** set of activities to develop SE skills in a step-by-step fashion;
- Use **Active** forms of learning, such as role-plays and behavioral rehearsal that provide students with opportunities to practice SE skills;

- **Focus** attention on SEL, with at least eight sessions devoted to SE skill development; and
- **Explicitly** target particular SE skills for development, with skills identified in lessons’ learning objectives.

Schools that expect to get results from SE competency promotion will focus on not only what skills they are teaching but how they are teaching them. See the sidebar for an example of how S.A.F.E. is illustrated in one evidence-based SEL program.

Additional Factors Influencing SEL Program Outcomes

Previous research has identified additional factors influencing SEL program effectiveness. Based on these findings, schools should also pay particular attention to program duration, program scope, and leadership support. More specifically, research suggests that:

- More intense programs of longer duration (multiyear) typically have greater effect than shorter, less intense programs.¹ SEL should be started in preschool and continued through high school.
- Programs that focus on changing behaviors tend to be more effective when addressed in multiple settings, for example, school, home, and community.⁴
- Leadership (principal, district-level) support is a critical factor in high-quality implementation.⁵ Such support makes it more likely that schools will have the resources and ongoing professional development they need to implement programs as intended and that SEL is an integral part of overall school improvement efforts.

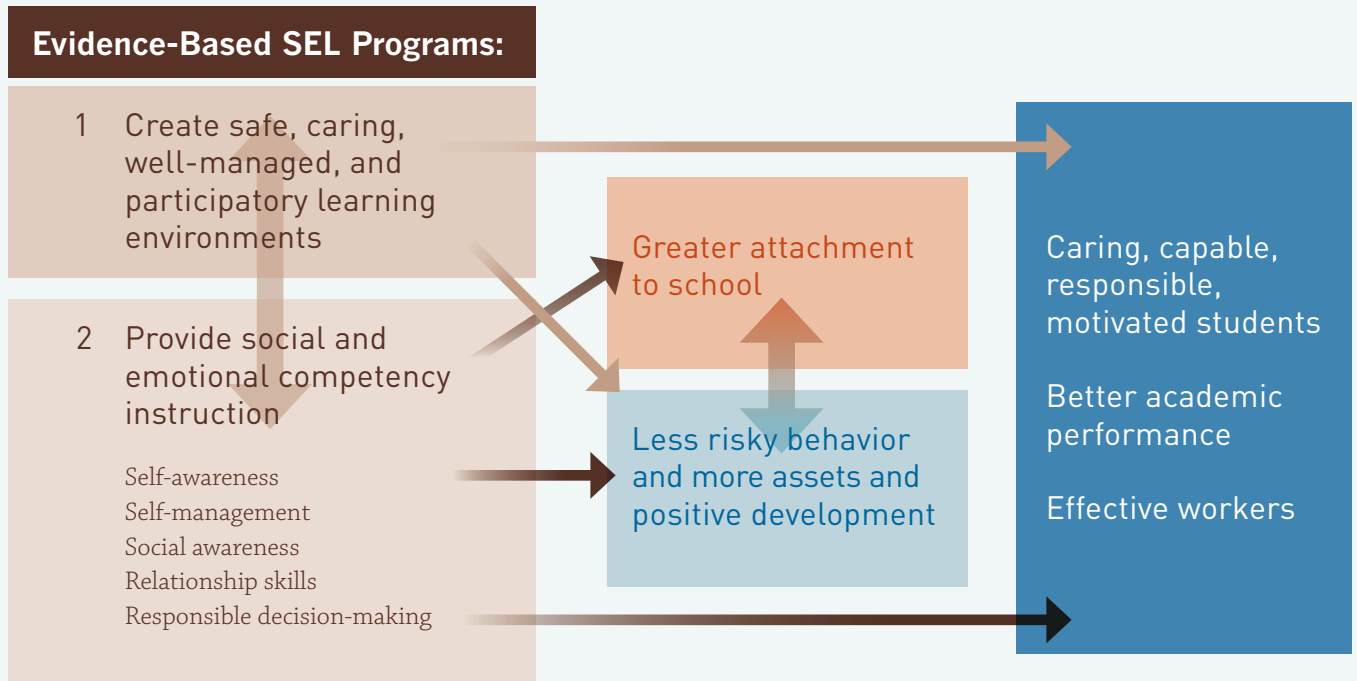
How an Evidence-based SEL Program Incorporates S.A.F.E.

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

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

Logic Model: How SEL Works

How Evidence-Based SEL Programs Work to Produce Greater Student Success in School and Life (CASEL)



There is extensive evidence that the two key elements of evidence-based SEL programs—(1) creating positive school learning environments and (2) providing SE competency instruction—result in greater academic performance and better long-term life outcomes.^{6,7} These two key elements of SEL programs are mutually reinforcing. Classrooms filled with socially and emotionally skilled students are more caring and safe, and positive learning environments provide opportunities for students to use and further develop SE competencies.

How SEL contributes to positive outcomes for youth is described in more detail below and illustrated in the following logic model shown above.

(1) *Contributing to Positive School Learning*

Environments: Positive learning environments have caring teacher-student relationships at their center. They are also well-managed, participatory, and hold high expectations for all students. They use instructional and classroom management strategies that address students’ social and emotional needs. These environments are motivating and psychologically and physically safe. Students in these environments feel more connected to peers, teachers, and their school, and they are more likely to adopt the prosocial and proacademic norms promoted by these individuals and settings.⁸ Students in these settings have better academic performance and attendance, as well as significantly lower rates of emotional distress, violence, delinquency, substance abuse, and sexual activity.^{9,10,11,12,13,14}

(2) **Providing SE Competency Instruction:** In order to participate fully and respectfully in a relationship-centered environment, however, students need basic social and emotional skills. They need to manage themselves appropriately and interact positively with others. SE competency instruction helps all children to engage in these behaviors more effectively. SEL instruction can also produce significant improvements in school-related attitudes, behaviors, and performance.² Socially and emotionally competent students are better able to take advantage of classroom learning opportunities and experiences and facilitate rather than disrupt the learning of their peers.¹⁵ Furthermore, when teachers integrate the teaching of SEL with academic content, student understanding of subject matter improves.^{16,17} There is also evidence that providing emotional regulation skills actually improves cognitive functioning.¹⁸

These same core SEL skills also help children avoid risky behaviors. Social competency instruction significantly decreases delinquency and alcohol and other drug use.¹⁴ Numerous studies have concluded that the most effective prevention programs provide SE competency instruction, particularly in decision-making, refusal, and emotional regulation skills.^{19,20}

For more on CASEL's SEL logic model go to <http://www.casel.org/basics/logic.php>.

How SEL Can Help SS/HS Grantees Address the Core Elements?

SS/HS Core Elements with Sample SEL Evidence-based Programs and Outcomes

SS/HS Core Element	Sample SEL Evidence-based Program(s)	Sample Outcomes
Safe school environments and violence prevention activities	Caring School Community Responsive Classroom Steps to Respect	<ul style="list-style-type: none"> • 24% stronger academic motivation • 33% greater sense of the school as a caring community • 12% more liking for school
Alcohol, tobacco, and other drug prevention activities	Lions Quest Caring School Community	<ul style="list-style-type: none"> • Lower alcohol and marijuana use • Lower lifetime and 30-day use of alcohol, 30-day binge drinking, 30-day cigarette use, lifetime marijuana use, and current use of beer, liquor, and chewing tobacco
Student behavioral, social and emotional supports	PATHS (Promoting Alternative Thinking Strategies)	<ul style="list-style-type: none"> • 20% increase in students' scores on cognitive skills tests • 32% reduction in teachers' reports of students exhibiting aggressive behavior • 36% increase in teachers' reports of students exhibiting self-control • 68% increase in students' emotional vocabulary
Mental health services	Social Decision-Making and Problem-Solving Program	<ul style="list-style-type: none"> • Lower levels of depression, self-destructive behavior, and delinquency
Early childhood social and emotional learning programs	High Scope Educational Approach for Preschool and Primary Grades	<ul style="list-style-type: none"> • Less time in special education • More success in life as indicated by higher levels of graduation from 12th grade, less likelihood of being arrested, and higher early adult incomes

Table 1

Social and emotional competency promotion addresses the risk and protective factors common to a broad range of problem behaviors (risky, disruptive, and delinquent). Because it occupies this central place in effective prevention programming (as table 1 illustrates), it can serve as a coordinating framework for universal prevention programming that meets the needs of all students.²¹ SEL promotes a common set of protective factors in two ways:

- By helping students develop a core set of skills, such as anger management and refusal skills, that are relevant to preventing a wide range of high-risk behaviors
- By promoting other protective factors, such as increased student connectedness, academic achievement, and perceived levels of social support, something that results from both SE competency promotion and strategies that improve the learning environment.

By focusing on shared protective factors, universal SEL programs not only offset the harm posed by risk factors but also promote positive healthy development. Addressing problem behaviors while promoting essential life skills is important because “being problem-free is not the same as being well-developed.”²²

By promoting a common set of protective factors, SEL provides a prevention framework that connects the core SS/HS elements by systematically addressing the numerous underlying social and emotional variables that are shared by these core elements and that affect learning and development.

Just as important, SEL provides a shared language and mutually reinforcing set of strategies that help overcome fragmentation, minimize competition for resources, and strengthen program effectiveness in addressing the core elements.

Because the same core SE competencies and environmental supports are important at all levels of intervention, SEL can also serve to coordinate early intervention supports and intensive treatment for students who are at risk or already experiencing mental health problems. Figure 1 illustrates this public health approach to providing mental health supports for students at various levels of need.

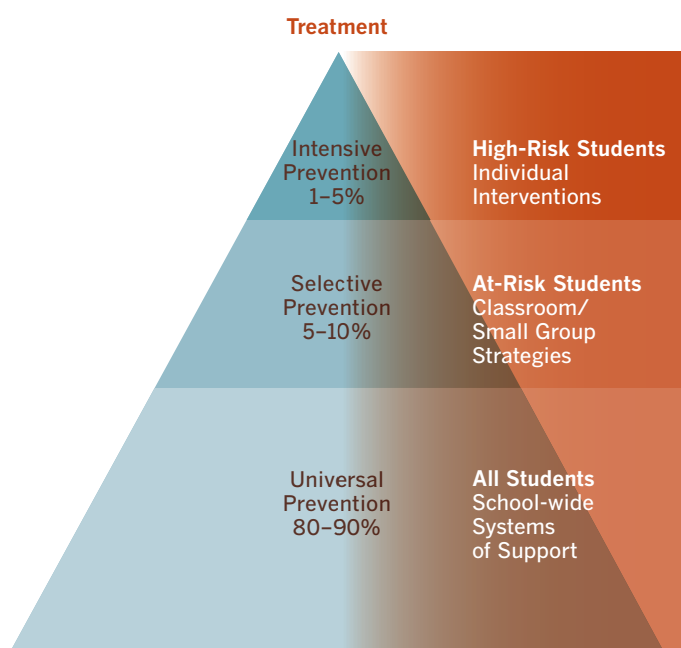


Figure 1

What This Research Means for SS/HS Grantees

The following recommendations for SS/HS grantees are based on the research described above, as well as the firsthand experiences of schools that have adopted an SEL framework

Using SEL as a Prevention Framework

- Make SE competency promotion central to school prevention efforts by providing skills instruction and creating positive learning environments.
- Address multiple risk and protective factors shared by many problem behaviors and mental health issues by using SEL programming that focuses on promoting SE competency and creating a safe, caring learning environment.
- Select an evidence-based program that matches students' needs for SE competency promotion and supports school staff in improving the school environment.
- Expand zero tolerance approaches to violence prevention to include a focus on teaching core SE skills and creating safe, caring learning environments.
- Assess current practices to see how well the four evidence-based S.A.F.E. strategies are integrated in the school's SEL and academic programming.
- Implement evidence-based programs and practices with fidelity (as they are intended). Because program implementation quality influences outcomes, work with program developers if adaptations are needed to avoid interfering with the essential components that make the program work.
- Address implementation issues by proactively anticipating barriers and responding effectively when issues arise.
- Support classroom teachers in integrating SE competency promotion into core subject areas (e.g., language arts and empathy skills; science experiments and the problem-solving framework) and using SEL instructional practices (e.g., cooperative learning, dialogic inquiry) so that SEL can become a part of routine classroom practice throughout the day.
- Seek out opportunities to integrate and reinforce the use of key SE knowledge, skills, and concepts from the evidence-based SEL school program at home, through after-school programs, and in targeted supports and interventions provided by school staff or community providers.

Implementing and Integrating SEL

- Gain the support of school leadership to enhance implementation, achieve positive outcomes, and lay the foundation for long-term sustainability.
- Invest in ongoing professional development. It is essential to high-quality implementation and the achievement of successful outcomes. Make sure to provide skills training for all adult members of the school community so that everyone can teach, model, and reinforce SE skills in a variety of settings beyond the classroom.

Promoting SE competencies through school-based SEL programming is central to effective prevention programming and can be a framework to coordinate the core SS/HS elements. SEL researchers and practitioners agree that by systematically promoting students' SE competency and by establishing learning environments that meet the social and emotional needs of students, schools help them succeed in school and life.

Endnotes

1. Greenberg, M. T., Weissberg, R. P., O'Brien, M. U., Zins, J. E., Fredericks, L., Resnik, H., & Elias, M. J. (2003). Enhancing school-based prevention and youth development through coordinated social, emotional, and academic learning. *American Psychologist*, *58*, 466–474.
2. Zins, J. E., Weissberg, R. P., Wang, M. C., & Walberg, H. J. (Eds.). (2004). *Building academic success on social and emotional learning: What does the research say?* New York: Teachers College Press.
3. Durlak, J. A., Weissberg, R. P., Taylor, R. D., & Dymnicki, A. B. (in preparation). *The effects of school-based social and emotional learning: A meta-analytic review*.
4. Greenberg, M. T., Domitrovich, C., & Bumbarger, B. (2001). The prevention of mental disorders in school-aged children: Current state of the field. *Prevention & Treatment*, *4*, Article 1.
5. Kam, C. M., Greenberg, M. T., & Walls, C. T. (2003). Examining the role of implementation quality in school-based prevention using the PATHS curriculum. *Prevention Science*, *4*(1), 55–63.
6. Elias, M. J. (2006). The connection between academic and social-emotional learning. In M. J. Elias and H. Arnold (Eds.). *The educator's guide to emotional intelligence academic achievement: Social-emotional learning in the classroom*. (pp. 4–14). Thousand Oaks, CA: Corwin Press.
7. Payton, J. W., Graczyk, P., Wardlaw, D., Bloodworth, M., Tompsett, C., & Weissberg, R. (2000). Social and emotional learning: A framework for promoting mental health and reducing risk behavior in children and youth. *Journal of School Health*, *70*, 179–185.
8. Hawkins, J. D., Catalano, R. F., & Miller, J.Y. (1992). Risk and protective factors for alcohol and other drug problems in adolescence and early adulthood: Implications for prevention. *Psychological Bulletin*, *112*(1), 64–105.
9. Resnick, D., Bearman, P., Blum, R., Bauman, K., Harris, K., Jones, J., Tabor, J., Beuhring, T., Sieving, R., Shew, M., Ireland, M., Bearinger, L., & Udry, R. (1997). Protecting adolescents from harm: Findings from the National Longitudinal Study on Adolescent Health. *JAMA*, *278*, 823–832.
10. Osterman, K. F. (2000). Students' need for belonging in the school community. *Review of Educational Research*, *70*: 323–367.
11. Blum, R. W., McNeely, C. A., & Rinehart, P. M. (2002). *Improving the odds: The untapped power of schools to improve the health of teens*. Minneapolis: University of Minnesota, Center for Adolescent Health and Development.
12. Hawkins, J. D., Catalano, R. E., Kosterman, R., Abbott, R., & Hill, K.G. (1999). Preventing adolescent health-risk behaviors by strengthening protection during childhood. *Archives of Pediatrics and Adolescent Medicine*, *153*, 226–234.
13. Symons, C. W., Cinelli, B., James, T. C., & Groff, P. (1997). Bridging student health risks and academic achievement through comprehensive school health programs. *Journal of School Health*, *67*(6): 220–227.
14. Wilson, D. B., Gottfredson, D. C., & Najaka, S. S. (2001). School-based prevention of problem behaviors: A meta-analysis. *Journal of Quantitative Criminology*, *17*, 247–272.

15. Linares, O. L., Rosbruch, N., Stern, M. B., Edwards, M. E., Walker, G., & Abikoff, H. B. (2005). Developing cognitive-social-emotional competencies to enhance academic learning. *Psychology in the Schools*, 42(4), 405–417.
16. Elias, M. J. 2004. Strategies to infuse social and emotional learning into academics. In J. E. Zins, R. P. Weissberg, M. C. Wang, H. J. Walberg (Eds.). *Building academic success on social and emotional learning: What does the research say?* New York: Teachers College Press.
17. Schaps, E., Battistich, V., & Solomon, D. (2004). Community in school as key to student growth: Findings from the Child Development Project. In J. E. Zins, R. P. Weissberg, M. C. Wang, H. J. Walberg (Eds.). *Building academic success on social and emotional learning: What does the research say?* New York: Teachers College Press.
18. Riggs, N. R., Greenberg, M. T., Kusche, C. A., & Pentz, M. A. (2006). The mediational role of neurocognition in the behavioral outcomes of a social-emotional prevention program in elementary schools students: Effects of the PATHS curriculum. *Prevention Science*, 7(1), 91–102.
19. Dusenbury, L., & Hansen, W. B. (1998). *Safe schools, safe students: A guide to violence prevention strategies*. Washington, DC: Drug Strategies.
20. Dusenbury, L., & Falco, M. (1995). Eleven components of effective drug abuse curricula. *Journal of School Health*, 65(10), 420–425.
21. Greenberg, M.T. (2007). School-based prevention: Current status and future challenges. Invited address to the National Research Council, National Academy of Sciences. Washington, DC.
22. Adelman and Taylor, (2008). *Technical assistance sampler on protective factors/resilience*. Downloaded June 1, 2008, from <http://smhp.psych.ucla.edu/pdfdocs/Sampler/Resiliency/resilien.pdf>.

Resources

Collaborative for Academic, Social, and Emotional Learning. (2003). *Safe and sound: An educational leader's guide to evidence-based social and emotional learning programs*. Chicago: Author.

For more on the knowledge and skills associated with the core SE competencies, go to: <http://www.casel.org/basics/skills.php> and <http://www.promoteprevent.org/Resources/briefs/social-emotional%20learning.html>.

For more on the Illinois SEL learning standards, go to: http://isbe.net/ils/social_emotional/standards.htm and <http://www.casel.org/standards/learning.php#IL>