



COLLABORATIVE FOR ACADEMIC, SOCIAL, AND EMOTIONAL LEARNING

SOCIAL AND EMOTIONAL LEARNING: A FRAMEWORK FOR PROMOTING MENTAL HEALTH AND REDUCING RISK BEHAVIORS IN CHILDREN AND YOUTH

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Reprinted from the Journal of School Health, May 2000, Vol 70. No. 5, pp. 179-185

ABSTRACT: *Many programs have been developed to help schools enhance their students' health and reduce the prevalence of problem behaviors such as drug use, violence, and high-risk sex. How should educators make selections among these? This article describes criteria based on theory, research, and best educational practice that identify key social and emotional learning (SEL) competencies and program features that educators who adopt these programs should consider. The SEL competencies include 17 skills and attitudes organized into four groups: awareness of self and others, positive attitudes and values, responsible decision making, and social interaction skills. The eleven program features critical to the success of school-based SEL programs emphasize curriculum design, coordination with larger systems, educator preparation and support, and program evaluation. Developed by the Collaborative to Advance Social and Emotional Learning (CASEL), this SEL framework may be used to guide selection of research-based prevention programs that address health, substance abuse, violence prevention, sexuality, character, and social skills.*

Both parents and educators want young people to succeed in their academic, personal, and social lives. They want young people to have the motivation and ability to achieve, to establish positive relationships with their peers and adults, to adapt to the complex demands of growth and development, to contribute to their peer group, family, school, and community, and to make responsible decisions that enhance their health and avoid risky behaviors. To help young people accomplish these tasks successfully, schools are increasingly challenged to offer more than basic instruction in the traditional academic areas. In response, many schools have adopted programs targeting one or more categories of problem behaviors such as violence, drug use, risky sexual behaviors, or early school withdrawal.

When schools adopt multiple programs to address these social and health issues, they face several implementation difficulties. Multiple programs tend to be poorly coordinated and thus compete among themselves and with lessons in core learning areas for scarce instructional time and school resources. Often they are of short duration and, because they typically remain on the margins of schools' established routines, they are not likely to be sustained from year to year.¹ Finally,

these programs frequently lack the environmental supports at home and school (e.g., modeling and reinforcement of healthy norms and Both parents and educators want young people to succeed in their academic, personal, and social lives. They behaviors by teachers and parents) that enable children to maintain what they have learned in the classroom. As a result of these weaknesses, some educators regard these programs as fads that will soon be replaced by yet another ad hoc program to address the next perceived crisis.²

Because the problem behaviors that these programs target often occur together in clusters, share many of the same risk and protective factors, and can be addressed by similar strategies³, there is growing national support for a more comprehensive, coordinated approach to the prevention of risk and promotion of positive youth development.^{4,5} Such comprehensive initiatives typically target multiple outcomes, are multi-year in duration, coordinate school-based efforts with those in families and the larger community, and include environmental supports so that children have opportunities to practice positive behaviors and receive consistent reinforcement.⁶

Social and emotional learning (SEL) programs provide systematic classroom instruction that enhances

children's capacities to recognize and manage their emotions, appreciate the perspectives of others, establish prosocial goals and solve problems, and use a variety of interpersonal skills to effectively and ethically handle developmentally relevant tasks. SEL programs also establish environments that support, reinforce, and extend this instruction so that what children learn in the classroom is generalized to their lives outside the classroom. The aim of SEL programs is to foster the development of students who are knowledgeable, responsible, and caring⁷, thereby contributing to their academic success, healthy growth and development, ability to maintain positive relationships, and motivation to contribute to their communities.

Hundreds of programs available to help educators prevent problem behaviors and promote children's health and character development. In order to make wise choices among this large field, educators need assistance in identifying both the elements of quality programs and programs that incorporate these elements. To address this need, the Collaborative to Advance Social and Emotional Learning (CASEL) has developed a framework of key SEL competencies (skills, attitudes, and values essential to the social and emotional development of young people) and identified program features that are critical to the effective enhancement of these competencies. The primary purpose of this paper is to describe these key elements of quality programs, which research, theory, and best educational practice suggest are essential to enhance children's social and emotional learning. The paper will also describe how CASEL is using these key elements to conduct a comprehensive SEL review of categorical and multi-target prevention and positive youth development programs.

Background

CASEL is an international organization founded in 1994 to establish social and emotional learning as an essential part of education from preschool through high school. Its goals are: 1) to advance the science of SEL, 2) to translate this scientific knowledge into effective school practices, 3) to disseminate information about scientifically sound SEL educational strategies and practices, 4) to enhance training so that educators effectively implement high-quality SEL programs, and 5) to network and collaborate with scientists, educators, advocates, policy makers, and interested citizens to increase coordination of SEL efforts.

To identify the critical elements of quality SEL programs and apply them in rating the programs included in the SEL program review, CASEL assembled an interdisciplinary team, representing the fields of school, community, and clinical psychology, school social work and health education, and special education. The work of this team builds upon CASEL's previously developed SEL guidelines for educators,⁷ which were intended to help educators reflect on what their schools are currently doing

to foster SEL, develop appropriate SEL goals and classroom learning activities, create supportive contexts for and assure the sustainability of SEL, and evaluate their SEL program initiatives.

The task of describing the critical elements of quality SEL programs and determining the extent to which they are incorporated in available prevention programs also builds upon previous reviews of prevention programs for youth.⁸⁻¹² However, the SEL program review differs from these efforts in several important respects. First, although the SEL program review includes the results of well-designed outcome evaluations as an element critical to successful programming, it devotes more rigorous attention than previous efforts to assessing each program's SEL content (Figure 1) and to program design, coordination, and educator preparation and support features (Figure 2). Second, the SEL program review includes within a single review programs from a broad range of content areas, including alcohol, tobacco, and other drug prevention, violence prevention, sexuality, health, and character education, and social skills enhancement. Its focus in reviewing this range of single and multi-target programs is on how well they teach the key SEL competencies and link them to the range of behaviors these programs target.

A third difference is that this review is limited to SEL programs whose instructional component has sequenced, well-designed lessons intended for use in regular education classrooms. The requirement that programs have a prescribed sequence of lessons contributes to an organized and coherent curriculum similar to that used in other learning areas, in which student learning at one level builds upon what has come before and prepares for what comes later. Prescribed lessons also contribute to maximizing the likelihood that teachers will present all key material and that there will be consistent implementation across classrooms.¹³ Lesson plans that are well-designed are another important aid to program implementation with integrity.¹⁴ Limiting the review to programs intended for use in regular-education classes underscores CASEL's belief that all children may benefit from school-based SEL and that SEL should be integrated into the regular school curriculum.¹⁵

Fourth, the SEL program review includes only programs covering two or more consecutive grades from pre-K to 12. This criterion is based on the considerable body of research in prevention and positive youth development suggesting that two or more years of programming have significantly greater impact than a single year.¹⁶⁻²⁰ Determining what constitutes a multi-year program, however, turned out to be a challenge. Initially, it was assumed that programs covering a range of grades, e.g., 4-6, would have lessons in a prescribed sequence for each grade specified in the range. However, it soon became evident that the lessons in some apparently multiyear programs are deemed by the program developers as appropriate for *any* grade in the range covered, e.g., fourth, fifth, *or* sixth. Moreover, in many cases,

there is not even a suggested sequence for the lessons. In other words, some programs that were first believed to be multi-year in design turned out to be collections of unsequenced activities designated for use within any grade in the range of grades reportedly covered by these programs. Such programs are not included in the SEL program review. On the other hand, programs that have only one year of sequenced classroom instruction are included if they have some other structure in subsequent years to promote maintenance of what students learned in the first year (e.g., ongoing peer mediation teams or booster sessions).

Finally, programs in the review must be available in their most recent and complete version and have a distribution system that is national in scope. This will assure fairness in the review process and also enable readers of the educator consumer's guide, which CASEL will publish to summarize review findings, to request programs of interest to them. To facilitate program selection by educators, programs added to the SEL program review will be posted with contact information on CASEL's web page (www.CASEL.org). When available, findings from the review will also be posted.

Content of Quality SEL Programs: Key Competencies

A primary consideration in developing this framework of key competencies that quality SEL programs should address was that the language used be understandable to a broad audience of educators, parents, policy-makers, program developers, and scientists. In addition, it was essential that the key SEL competencies be based on research demonstrating connections between social adjustment and children's health outcomes^{15,21-22} and on relevant theories. In the development process, two groups of theoretical models were reviewed: (a) those specific to social and emotional learning (e.g., theories of emotional intelligence,²³ social and emotional competence promotion,²¹ social developmental model,²⁴ social information processing,²² and self-management²⁵) and (b) those pertaining to behavior change and learning theories (e.g., the Health Belief Model,²⁶ the Theory of Reasoned Action,²⁷ Problem Behavior Theory,²⁸ and Social-Cognitive Theory²⁹).

Because no single model adequately captures all the elements that the models collectively suggest are important for social competence, the CASEL framework of SEL competencies (Figure 1) combines elements from all of these perspectives. It is divided into four groups of closely related but distinct elements that build upon one another within and across groups: 1) awareness of self and others, 2) positive attitudes and values, 3) responsible decision making, and 4) social interaction skills. The first group of competencies begins with learning to correctly identify and regulate one's feelings.²³ An example of such awareness is being able to correctly name and distinguish among a variety of emotions, such as

understanding how anger is different from sadness. Another example is understanding the situations that commonly give rise to a range of emotions, such the satisfaction that comes when being praised for a job well done or the shame associated with betraying a friend. Awareness of feelings also includes the ability to identify the physical states and thoughts associated with feelings and to understand that contradictory feelings such as love and hate sometimes occur together. Beyond recognizing feelings, it is important to be able to monitor and regulate them. This includes the capacity to moderate negative feelings so that they do not impede appropriate action, control impulsive behavior in response to strong feelings, and enhance pleasant feelings to comfort oneself.

Being able to identify and regulate one's feelings in adaptive ways also contributes to the promotion of a constructive sense of self, the third in this first group of SEL competencies. Knowledge of personal feelings, strengths, and areas in which one might want or need to improve, along with self-regulation of impulses and actions, are critical to the development of a sense of confidence and optimism that one will be able to meet the challenges of everyday life now and in the future. Furthermore, social situations require that young people extend their awareness and understanding of feelings and other personal attributes to others. The ability to recognize the feelings and take the roles of others (perspective taking) helps one predict how they might act in a given situation and guides one's own behavior in response.

While accurate awareness of self and others represents a critical step toward social and emotional competency, awareness alone is insufficient to motivate youth to use their knowledge and skills for prosocial ends. The second group of competencies in the SEL framework identifies positive attitudes and values that guide behavior. These elements focus on the intentions behind behaviors. The first of these elements, personal responsibility, is the intention to behave in ways that promote health (e.g., not using drugs or engaging in risky sexual behavior) and to treat others honestly and fairly (e.g., keeping promises and appropriately recognizing others' contributions to shared projects). The second element in this group of SEL competencies, respect for others, is also fundamental to the development of good character. It encompasses avoiding stereotypes and prejudice, valuing the strengths that come from individual differences, and respecting the rights of all people. The third competency in this group, social responsibility, extends the intention to behave ethically to the betterment of one's community and the environment. Examples might include participating in activities to make one's classroom a more caring place, a neighborhood service project, or community efforts to reduce the wasteful use of natural resources.³⁰

The competencies in the first two groups of Figure 1 provide a foundation for the skills described in the third group. Comprehension of the feelings of those involved

in a situation and possession of the core values of responsibility and respect for others are essential to making effective and responsible decisions, which includes identifying situations that pose a challenge or problem and assessing the risks, barriers, and resources relevant to a solution (problem identification). Of further importance to the development of positive and informed solutions to problems are the capacities to identify and evaluate the norms that influence behavior (social norm analysis) and to set adaptive goals (competency 10). An example of their importance is the norm to conform to peer group pressure felt strongly by adolescents and setting a goal to resist the pressure to use alcohol while maintaining important relationships through suggesting alternatives. The identification of a range of possible alternative solutions to a problem, thinking prospectively about the probable consequences of each, and making the best choice complete the process of developing positive and informed solutions (problem solving). The implementation and evaluation of decisions made form a bridge from this third group of SEL competencies to the social interaction skills described in section four of Figure 1.³¹

Once a problem has been identified, a goal set, and a solution developed, social interaction skills are essential to following through with the decision that has been made. Active listening, through which youth demonstrate to others that they have been understood, and the capacity to use both verbal and nonverbal means to clearly express thoughts and feelings are the bases for all social interaction and so are listed first in this fourth group of SEL competencies. Depending upon the context, skills such as cooperating with others in a group to accomplish a shared outcome, negotiating a peaceful resolution to a dispute so that all concerned are satisfied, avoiding or refusing to participate in irresponsible behaviors, and/or seeking support and assistance from personal and community resources may be appropriate applications of these communication skills.

Teaching young people how to apply these SEL competencies in their lives may not in itself ensure that they will be able to generalize them to the range of behavioral domains commonly targeted in school-based prevention programs. In order for SEL programs to successfully promote positive student outcomes in these domains (health promotion, healthy sexual development, prevention of drug use and violence, promotion of school achievement and citizenship), these competencies must be specifically and intentionally applied to achieving these outcomes. Programs intending to impact behaviors in these domains must consistently include learning activities that apply the SEL competencies to these behaviors. Examples of such applications include lessons that: 1) explore how students' feelings, personal values, and conflicts among these influence decisions about marijuana use, physical fighting, or sexual relationships; 2) identify the possible short- and long-term health, social, and/or legal consequences of alcohol use, carrying weapons,

or finishing school; 3) critically evaluate social norms and media messages regarding tobacco use, dietary and exercise habits, and gender roles; or 4) practice active listening, perspective taking, refusal and/or negotiation skills in situations where violence, drug use, or risky sexual behavior is likely.

This framework of key SEL competencies includes skills, attitudes, and values that are critical to the promotion of positive behaviors across a range of contexts important to the academic, personal, and social development of young people. As indicated in the examples above, it is this capacity of SEL to provide a bridge connecting categorical areas that suggests its utility as a resource for addressing school-based prevention initiatives in a more integrated, coordinated manner. When generalized across these contexts, the SEL competencies promote the development of young people who are not only able to engage in responsible and health-promoting behaviors but also have a positive self image, are able to develop mutually supportive relationships, are successful in school, and are contributing and caring members of their peer groups, families, and communities.

Features of Quality SEL Programs

The literature on best practice in health promotion, risk prevention, and education was consulted in developing the program design, program coordination, educator preparation and support, and program evaluation features of quality SEL programs shown in Figure 2.^{7,21,32-35} Program design features listed in the first section of Figure 2 include: 1) the selection of program objectives and a sequence of learning activities based on a clearly articulated conceptual framework; 2) instructions sufficient to enable teachers to implement a variety of learning strategies that actively involve students, draw upon their previous experience, provide them with opportunities for skill practice and feedback, and address their diverse learning styles; 3) structures to assist teachers infuse and apply SEL instruction across other subject areas within the school curriculum; 4) well-organized, easy-to-follow lesson plans with clear objectives and learning activities, student assessment tools, and a rationale linking individual lessons to the overall program design; and 5) tools for monitoring program implementation with guidance on how to use these tools and the data collected for improvement of program delivery.

The second group of program features, coordination, includes school-wide initiatives and the development of school-family and school-community partnerships that reinforce and extend SEL instruction beyond the classroom to the entire school, home, and community.^{16,21,33-34} Examples of school-wide coordination efforts include joint planning by teachers using the program, the development of a school climate characterized by mutual support and trust between teachers and students, and specifying roles in program implementation for non-teaching personnel, especially those providing student health and

mental health services. Examples of how programs might support the development of school-family partnerships include establishing regular and varied communication channels between schools and families and building family members' capacity to be supportive of and involved in their children's education both at home and in the classroom. The promotion of school-community partnerships depends on enhancing student understanding of and their ability to appropriately use community resources and encouraging members of the community to participate in classroom instruction and provide service learning opportunities for students.

Adequate training in effective teaching strategies and ongoing technical support are crucial to the implementation of programs with integrity.^{17-19,36-37} Teachers who are ill-prepared compromise the benefits that students receive even if the content and design of a program are exemplary. Quality SEL programs provide training that goes beyond acquainting teachers with their purpose, methods, and materials. It includes efforts to promote teacher acceptance of the program, such as opportunities to explore their attitudes toward the program, practice using program materials and receiving feedback, and develop classroom implementation plans. Quality programs also build teachers' capacity in program delivery by providing on-site technical assistance, such as observation and coaching, advanced training, and help with implementation monitoring.

In recent years, there has been a lot of interest in evidence for the efficacy of school-based prevention programs based on methodologically sound studies.^{9-10,38-39} While the effectiveness of programs in producing significant, positive effects on SEL-related outcomes as demonstrated in well designed evaluation studies is an important criterion of quality programs, it is also essential to determine whether these studies include evidence that data measuring the integrity of program implementation were collected. The availability of such data might suggest that a study's failure to find significant positive effects may be due to inadequate implementation rather than to program weaknesses.⁴⁰

Operationalizing the Key Elements of Quality SEL Programs

In order to determine how well school-based prevention efforts incorporate the SEL competencies and program features, rating scales with operational definitions of these key elements and examples characterizing each level of quality have been developed. Given space limitations, this section briefly provides illustrations of two of these scales, one for program content (the SEL competencies) and the other for one of the program features (educator preparation and support).

In developing a rating scale for determining how well programs teach SEL competencies, the goal was to describe a progression that, if followed, would promote student self-efficacy and mastery of these competencies.

Social-Cognitive Theory (SCT) was the primary source for developing operational definitions of the ratings in this scale. According to SCT, self-efficacy is a primary determinant of skill mastery. It is defined as one's confidence in performing particular behaviors and achieving desired outcomes. Self-efficacy is progressively promoted through verbal instruction and encouragement, watching others model behaviors and observing the results, participating in guided and independent practice, getting reinforcement, and celebrating successes.²⁹ Social-cognitive theorists also emphasize the importance for skill mastery of promoting clear connections between the concepts and skills being taught and students' actual experiences in order to make explicit the relevance to their lives of the content being addressed.⁴¹

The rating scale developed for SEL competencies has four points (0-3), a number that is both manageable and adequate for differentiating programs on how well they teach these competencies. The 0-3 scale is hierarchical in that each rating is assumed to incorporate all the characteristics of lower ratings. A rating of "0" indicates that the program does not address a key SEL competency. A rating of "1" indicates that a program provides information only to increase students' knowledge about the concept or skill. Programs that earn a rating of "2" promote connections between an SEL competency and students' lives, thus providing them with a personalized understanding of the concept or skill. Only programs that provide opportunities for students to practice a competency to promote its application in their lives beyond the lesson earn a rating of "3."

The rating scale developed for educator preparation and support is based on a similar understanding of how teachers acquire the skills they need to implement a program in the classroom. Programs that have no formal training program for teachers are rated "0". Those that simply orient teachers to the program's objectives, methods, and materials earn a rating of "1". To get a rating of "2," program training workshops have to promote teacher acceptance of the program through providing them with opportunities to explore its relevance to their own teaching and practice using the materials while receiving feedback and reinforcement from trainers and peers. A rating of "3" on educator preparation and support requires an opportunity for implementation planning during the initial training workshop and the provision of on-site technical support in the form of classroom observation and coaching or implementation trouble-shooting after the initial workshop.

Other program information of interest to those making program selection decisions that will not be rated but described in CASEL's consumer guide for educators include: 1) contact and order information, 2) publication date and revision schedule, 3) cost of materials and training, 4) grades and content domains covered, 5) program duration and intensity, 6) types of materials included, and 7) whether or not the program explicitly describes how it addresses student learning standards as developed by an appropriate professional organization.

Figure 1
Key SEL Competencies

Awareness of Self and Others

- Awareness of feelings: The capacity to accurately perceive and label one’s feelings
- Management of feelings: The capacity to regulate one’s feelings
- Constructive sense of self: The capacities to accurately perceive one’s strengths and weaknesses and handle everyday challenges with confidence and optimism
- Perspective taking: The capacity to accurately perceive the perspectives of others

Positive Attitudes and Values

- Personal responsibility: The intention to engage in safe and healthy behaviors and be honest and fair in dealing with others
- Respect for others: The intention to accept and appreciate individual and group differences and to value the rights of all people
- Social responsibility: The intention to contribute to the community and protect the environment

Responsible Decision Making

- Problem identification: The capacity to identify situations that require a decision or solution and assess the associated risks, barriers, and resources
- Social norm analysis: The capacity to critically evaluate social, cultural, and media messages pertaining to social norms and personal behavior
- Adaptive goal setting: The capacity to set positive and realistic goals
- Problem solving: The capacity to develop, implement, and evaluate positive and informed solutions to problems

Social Interaction Skills

- Active listening: The capacity to attend to others both verbally and non-verbally to demonstrate to them that they have been understood
- Expressive communication: The capacity to initiate and maintain conversations and to clearly express one’s thoughts and feelings both verbally and nonverbally
- Cooperation: The capacity to take turns and share in both pairs and group situations
- Negotiation: The capacity to consider all perspectives involved in a conflict in order to resolve the conflict peacefully and to the satisfaction of all involved
- Refusal: The capacity to make and follow through with clear “NO” statements, to avoid situations in which one might be pressured, and to delay acting in pressure situations until adequately prepared
- Help seeking: The capacity to identify the need for support and assistance and to access available and appropriate resources

Figure 2
Features of Quality Programs that Enhance SEL competencies

Program Design

- Clarity of rationale: Program objectives and the methods for achieving them are based on a clearly articulated conceptual framework.
- Promotion of effective teaching strategies: Program includes detailed instructions to assist teachers in using a variety of student-centered teaching strategies.
- Infusion across subject areas: Program provides structure for the infusion and application of SEL instruction across other subject areas within the school curriculum.
- Quality of lesson plans: Program lessons follow a consistent format that includes clear objectives and learning activities, student assessment tools, and a rationale linking lessons to program design.
- Utility of implementation monitoring tools: Program provides tools for monitoring implementation and guidance in their use, including how to use the collected data to improve program delivery.

Program Coordination

- School-wide coordination: Program includes structures that promote the reinforcement and extension of SEL instruction beyond the classroom and throughout the school.
- School-family partnership: Program includes strategies to enhance communication between schools and families and involve families in their children’s SEL education both at home and at school.
- School-community partnership: Program includes strategies that involve students in the community and community members in school-based instruction.

Educator Preparation and Support

- Teacher training: Program provides teachers with formal training to enable them to comfortably and effectively implement the program within their classrooms and schools
- Technical support: Program provides teachers with ongoing assistance to further build their capacity to successfully implement the program and to facilitate the resolution of any implementation issues.

Program Evaluation

- Quality of outcome evaluation: Program provides evidence of positive effects on SEL-related student outcomes from at least one methodologically sound study evaluation: that includes program implementation data.

Conclusion

The key competencies and program features of quality SEL programs described in this paper provide educators with a research and theoretically-based framework for selecting quality school-based prevention programs. CASEL encourages educators who adopt school-based prevention programs to use this framework to systematically evaluate program quality as part of their selection process. It is hoped that publication of the consumer's guide summarizing the results of the SEL program review based on this framework will contribute to improved program selection and thereby help young people succeed in their academic, personal, and social lives. In addition, this framework is a resource for the development of more integrated, comprehensive school-based programs intended to enhance children's growth and development. Ultimately, CASEL's vision is that this work will contribute to an understanding of educational reform that goes beyond the effective management of schools and the standards used to measure children's academic achievement to include the creation of learning environments that optimize the social, emotional, physical, intellectual, and moral development of children.

While selecting exemplary programs that incorporate all of the key elements for success is essential to promoting children's social and emotional development, CASEL realizes that program implementation with integrity by educators who serve children is also critical. Beyond identifying a framework of elements for quality programs and selecting programs that best incorporate these elements lie the challenges of establishing policies and training experiences to support educators in effectively implementing and institutionalizing high-quality SEL programs.

References

1. Adelman HS, Taylor L. Moving prevention from the fringes into the fabric of school improvement. *J Educ and Psychol Consult*. In press.
2. Shriver TP, Weissberg RP. No new wars! *Educ Week*. 1996;15(34): 33, 37.
3. Dryfoos JG. The prevalence of problem behaviors: implications for programs. In: Weissberg RP, Gullotta TP, Hampton RL, Ryan BA, Adams GR, eds. *Healthy Children 2010: Enhancing Children's Wellness*. Thousand Oaks, CA: Sage Publications. 1997;17-46.
4. Kolbe LJ, Collins J, Cortese P. Building the capacity for schools to improve the health of the nation: a call for assistance from psychologists. *Am Psychol*. 1997;52:256-265.
5. Marx E, Wooley SF, Northrop D, eds. *Health Is Academic*. New York, NY: Teachers College Press; 1998.
6. Graczyk PA, Weissberg RP, Payton JW, Elias MJ, Greenberg MT, Zins JP. A framework for evaluating school-based programs that promote social and emotional learning. In: Bar-On R and Parker JDA, eds. *The Handbook of Emotional Intelligence*. Jossey-Bass. In press.
7. Elias MJ, Zins JE, Weissberg RP, Frey KS, Greenberg MT, Haynes NM, Kessler R, Schwab-Stone ME, Shriver TP. *Promoting Social and Emotional Learning: Guidelines for Educators*. Alexandria, VA: Association for Supervision and Curriculum Development; 1997.
8. Greenberg MT, Domitrovich C, Bumbarger B. *Preventing Mental Disorders in School-aged Children: A Review of the Effectiveness of Prevention Programs*. Washington, DC: US Dept Health and Human Services, Center for Mental Health Services; 1999.
9. *School Health: Findings from Evaluated Programs*. 2nd ed. Washington, DC: US Dept Health and Human Services; 1998.
10. Preventing Drug Use among Children and Adolescents. Washington, DC: National Institutes of Health, National Institute on Drug Abuse; 1997. Publication No. 97-4212.
11. Drug Strategies. Safe Schools, Safe Students: A Guide to Violence *Prevention Strategies*. Washington, DC: Author; 1999.
12. Drug Strategies. Making the Grade: A Guide to School Drug Prevention *Programs*. Washington, DC: Author; 1996.
13. Lohrmann DK, Wooley SF. Comprehensive school health education. In: Marx E, Wooley SF, Northrop D., eds. *Health Is Academic*. New York, NY: Teachers College Press. 1998;43-66.
14. Roe BD, Ross EP. Student Teaching and Field Experiences Handbook. Upper Saddle River, NJ: Prentice-Hall, Inc.; 1998.
15. Weissberg RP, Greenberg MT. Social and community competence-enhancement and prevention programs. In: Damon W (series ed.) and Sigel, IE, Renninger KA (vol. eds.). *Handbook of Child Psychology: Vol. 5, Child Psychology in Practice* (5th ed.). New York: John Wiley & Sons. 1998; 877-954.
16. Weissberg RP, Caplan MZ, Sivo PJ. A new conceptual framework for establishing school-based social competence promotion programs. In: Bond LA, Compas BE, eds. *Primary Prevention and Promotion in the Schools*. Newbury Park, CA: Sage Publications. 1989;255-296.
17. Botvin GJ, Baker E, Dusenbury L, Tortu S, Botvin EM. Preventing adolescent drug abuse through a multimodal cognitive-behavioral approach: results of a 3-year study. *J Consult and Clin Psychol*. 1990;58:437-446.
18. Errecart MT, Walberg HJ, Ross JG, Gold RS, Fiedler JL, Kolbe LJ. Effectiveness of teenage health teaching modules. *J Sch Health*. 1991;61(1, special insert):26-30.
19. Connell DB, Turner RT, Mason EF. Summary of findings of the School Health Education Evaluation: health promotion effectiveness, implementation, and costs. *J Sch Health*. 1985;55:316-323.
20. Perry CL, Klepp K, Siller C. Community-wide

strategies for cardiovascular health: the Minnesota Heart Health Program youth program. *Health Educ Res.* 1989;4:87-101.

21. Consortium on the School-Based Promotion of Social Competence. The school-based promotion of social competence: theory, practice, and policy. In: Haggerty RJ, Sherrod LR, Garmezy N, Rutter M, eds. *Stress, Risk, and Resilience in Children and Adolescents: Processes, Mechanisms, and Interventions*. New York: Cambridge University Press; 1994;268-316.

22. Crick NR, Dodge KA. A review and reformulation of social information-processing mechanisms in children's social adjustment. *Psychol Bull.* 1994;115(1):74-101.

23. Mayer JD, Salovey P. What is emotional intelligence? In: Salovey P, Sluyter DJ, eds. *Emotional Development and Emotional Intelligence*. New York: Basic Books. 1997;3-31.

24. Hawkins JD. Academic performance and school success: sources and consequences. In: Weissberg RP, Gullotta TP, Hampton RL, Ryan BA, Adams GR, eds. *Healthy Children 2010: Enhancing Children's Wellness*. Thousand Oaks, CA: Sage Publications. 1997;278-305.

25. Kanfer FH, Goldstein AP, eds. *Helping People Change: A Textbook of Methods*. New York: Pergamon Press. 1991.

26. Becker MH, ed. The Health Belief Model and personal health behaviors. *Health Educ Mon.* 1974;2(whole issue):324-473.

27. Azjen I, Fishbein M. *Understanding Attitudes and Predicting Social Behavior*. Englewood Cliffs, NJ: Prentice Hall; 1980.

28. Jessor R. Risk behavior in adolescence: a psychosocial framework for understanding and action. *Dev Rev.* 1992;12(4):374-390.

29. Bandura A. Personal and collective efficacy in human adaptation and change. In: Adair JG, Belanger D, et al. *Advances in Psychological Science, Vol I: Social, Personal, and Cultural Aspects*. Hove, England: Psychology Press/Erlbaum. 1998:51-71.

30. Likona T. *Educating for character: how our schools can teach respect and responsibility*. New York: Bantam Books; 1991

31. Elias MJ, Tobias SE. *Problem Solving/Decision Making for Social and Academic Success*. Washington, D.C.: National Education Association; 1990.

32. Hawkins JD, Weis JG. The social developmental model: an integrated approach to delinquency prevention. *J Prim Prev.* 1985;6:73-97.

33. Dusenbury L, Falco M. Eleven components of effective drug abuse prevention curricula. *J Sch Health.* 1995;65(10):420-425.

34. Dusenbury L, Falco M, Lake A, Brannigan R, Bosworth K. Nine critical elements of promising violence prevention programs. *J Sch Health.* 1997;67(10):409-414.

35. Kirby D, Short L, Collins J, Rugg D, Kolbe L, Howard M, Miller B, Sonenstein F, Zabin L (1994). School-based programs to reduce sexual risk behaviors: A review of effectiveness. *Public Health Reports*, 109(3), 339-360.

36. Ross JG, Luepker RV, Nelson GD, Saavedra P, Hubbard B. Teenage Health Teaching Modules: Impact of teacher training on implementation and students. *J Sch Health.* 1991;61:31-34.

37. Smith DW, McCormick LK, Steckler AS, McLeroy KR. Teachers' use of health curricula: Implementation of Growing Healthy, Project SMART, and the Teenage Health Teaching Modules. *J Sch Health.* 1993;63:349-354.

38. *Expert Panel on Safe, Disciplined, and Drug-free Schools, Guidelines and Materials for Submitting*. Available at: <http://www.ed.gov/offices/OESE/SDFS/programs.html>. May 1999.

39. Centers for Disease Control and Prevention. *Research to Classroom: Programs That Work*. Atlanta, GA: Author. Available at: <http://www.cdc.gov/nccdphp/dash/rtc>.

40. Durlak JA. Why program implementation is important. Co-published simultaneously *J Prev & Interv in the Com.* 1998;17(2):5-18. In: Durlak JA, Ferrari JR, eds. *Program Implementation in Preventive Trials*. The Haworth Press, Inc;1998;5-18.

41. Ladd GW, Mize J. A cognitive-social learning model of social-skill training. *Psychol Rev.* 1982;90:127-157.

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