Chapter 28
The Positive Action Program: Improving Academics, Behavior, and Character by Teaching Comprehensive Skills for Successful Learning and Living

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When I do good, I feel good; when I do bad, I feel bad; and that's my religion. Abraham Lincoln
(Fehrenbacher & Fehrenbacher, 1996, p. 245)

Introduction

It seems like a 'no-brainer'. There is more to student learning and wellbeing than the ABCs. But *which* ABCs? It is not just the alphabet any more. Today it is *A*cademics plus *B*ehavior and *C*haracter – the *new basics* that can make students' school years relevant for their entire lives. One method of doing this successfully is to teach comprehensive *S*kills for *S*uccessful *L*earning and *L*iving (SSLL) – and one proven program that does that is the *Positive Action* program. In this chapter we will review the prevalence and impact of behavioral, emotional, and academic problems, discuss the need for SSLL programs and their potential impact, describe the *Positive Action* program, summarize the results of multiple evaluations of the program, and discuss future research needs on SSLL programs.

Prevalence and Impact of Behavioral, Emotional, and Academic Problems Among Students

Education has an urgent need to learn more about the role of behavior, emotion, values, character, and social skills in improving student academic performance, wellbeing, and life success (Eccles, 2004; Meece, Anderman, & Anderman, 2005).

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Since the passing of the No Child Left Behind Act in the United States, education has increasingly focused on teaching to core content standards to improve academic achievement scores, particularly in reading and math, almost to the total exclusion of the values, character, emotional, social, and behavioral domains (Hamilton et al., 2007). Consequently, education has seen problem behaviors increase (Eisenbraun, 2007) and school safety decrease (Eaton, Kann, et al., 2008) with no real gain in academics (CEBP, 2002; CEP, June 2007; ED, 2000; Heaviside, Rowland, Williams, & Farris, 1999; Perie, Grigg, & Dion, 2005; Perie, Grigg, & Donahue, 2005).

Schools also are expected to prevent violence, substance use, and other disruptive behaviors – all of which are clearly linked to student values, character, and school performance (Fleming et al., 2005; Malecki & Elliott, 2002; Wentzel, 1993). Approximately 30% of high school students engage in multiple high-risk behaviors (e.g., violence, substance use, sex, violence, delinquency) that interfere with their school performance and jeopardize their potential for success in life (Centers for Disease Control and Prevention, 2008; Dryfoos, 1997). The prevalence of discipline problems correlates positively with the prevalence of violent crimes within a school (Heaviside et al., 1999) which, in turn, affects school attendance and achievement (Eaton, Brener, & Kann, 2008; Walberg, Yeh, & Mooney-Paton, 1974). Mental health concerns also become more prevalent as students move into adolescence (Costello, Mustillo, Erkanli, Keeler, & Angold, 2003) and can contribute to behavioral problems that detract from achievement. Similar trends and dynamics are evident for behaviors related to physical health, such as exercise and nutrition (Breinbauer & Maddaleno, 2005), with associated conditions, such as obesity, linked to lower levels of academic achievement (Crosnoe & Muller, 2004). Furthermore, many students believe their teachers do not care about them, disrupt the educational experiences of classmates, and lack social-emotional competence (Benson, Scales, Leffert, & Roehlkepartain, 1999). There is a great need to improve how schools address student outcomes in a range of interrelated areas, including academics, behavior, and character (Allensworth, Lawson, Nicholson, & Wyche, 1997); we call that combination of skills the Skills for Successful Learning and Living (SSLL), the skills for learning and living in the physical, intellectual, social, and emotional domains.

The Need for Comprehensive "Skills for Successful Learning and Living" (SSLL) Programs

A number of different kinds of school-based programs have been developed to address problems of academic achievement (Slavin & Fashola, 1998) and many others have offered the promise of doing so indirectly through a focus on specific disruptive health-related behaviors (Battistich, Schaps, Watson, Solomon, & Lewis, 2000; Biglan et al., 2004; DuPaul & Stoner, 2004; Elias, Gara, Schuyler, Branden-Muller, & Sayette, 1991; Flannery et al., 2003; Flay, 1985; Flay, 2007; Horowitz & Garber, 2006; Leff, Power, Manz, Costigan, & Nabors, 2001; Peters & McMahon,

1996; Smith, Daunic, Miller, & Robinson, 2002; Sussman, Dent, Burton, Stacy, & Flay, 1995; Tolan & Guerra, 1994). Although many of these programs are promising, as a group they have limitations for promoting healthy development and academic achievement. First, most are problem-specific, and tend to address the proximal, micro-level predictors of one problem behavior, not the multifaceted, distal,[1] macro-level factors that influence all important outcomes (Flay, 2002; Flay & Petraitis, 1994; Flay, Snyder, & Petraitis, 2009; Petraitis, Flay, & Miller, 1995; Power, 2003); so they have few sustained effects (Flay, 2002). Second, there has been little effort to structure curricula and other components so that gains in the targeted non-academic domains systematically translate into gains in achievement. This may help to explain the limited and inconsistent pattern of effects of such programs on academic outcomes (Catalano, Berglund, Ryan, Lonczak, & Hawkins, 2004; Flay, 2002). To address the preceding limitations, there is a need for comprehensive, coherent, school-wide programs that recognize that students' academic performance, their learning and life skills, multiple behaviors, and character are all interrelated. Otherwise, we run the risk of failing to reduce rates of critical negative behavioral outcomes or to increase rates of positive behavioral and academic outcomes in ways that are truly synergistic, effective, and enduring.

The preceding trends notwithstanding, there has been a movement in recent years to more comprehensive, multi-modal, and multi-level programs that address multiple behaviors and that involve families; and these generally appear to be more effective (Battistich et al., 2000; Catalano, Berglund, et al., 2004; Derzon, Wilson, & Cunningham, 1999; Elias et al., 1991; Flay, 2000; Flay, Graumlich, Segawa, Burns, & Holliday, 2004; Hawkins, Catalano, Kosterman, Abbott, & Hill, 1999; Hawkins, Catalano, & Miller, 1992; Kellam & Anthony, 1998; Lerner, 2002). The best SSLL programs use direct instruction and interactive approaches that are holistic, developmentally appropriate, and culturally sensitive to teach students the values and skills, and to be intrinsically motivated, to have good physical health, learn effectively in school and life, make responsible decisions, solve problems effectively, recognize and manage their emotions and other personal resources, appreciate the perspectives of others (e.g., empathy, tolerance), handle interpersonal situations effectively, be honest with themselves and others, establish positive goals, and engage in self improvement.

Most behavioral management (DuBois, 1996; DuPaul & Stoner, 2004; Kazdin, 2001; Kellam, Rebok, Ialongo, & Mayer, 1994; Sprague & Golly, 2005; Sprague, Golly, Bernstein, Munkres, & March, 1999; Sugai, Sprague, Horner, & Walker, 2000), social and character development (Althof & Berkowitz, 2006; Berkowitz & Battistich, 2008; Berkowitz & Bier, 2004; Lickona, 1993), social and emotional learning (Brown, Roderick, Lantieri, & Aber, 2004; CASEL, 2003; Lemerise &

[1] Proximal and distal are terms used in various disciplines to suggest the distance between factors in a causal chain. For example, intention to do a behavior is a proximal predictor/cause, while parenting style or is a more distal influence/cause of behavior. These terms are also used when referring to the outcomes of a program, where attitudes might be a proximal outcome and actual behavior a more distal outcome.

Arsenio, 2000; Payton et al., 2000), and positive youth development programs (Catalano, Berglund, et al., 2004; Lerner, Almerigi, Theokas, & Lerner, 2005; Lerner, Dowling, & Anderson, 2003) are manifestations of SSLL. Others have recently written about the links of Positive Youth Development (PYD) to Character Education (CE) (Catalano, Hawkins, & Toumbourou, 2008) and the complimentary nature of Social and Emotional Learning (SEL) and CE (Elias, Parker, Kash, Weissberg, & O'Brien, 2008). The *Positive Action* (PA) program (Flay, 2002; Flay & Allred, 2003; Flay, Allred, & Ordway, 2001) has been recognized by the U.S. Department of Education's What Works Clearinghouse as the only "character education" program to meet the evidentiary requirements for improving both academics and behavior. We believe that the *Positive Action* program incorporates all the best aspects of all three of these major approaches to social and character development (SACD) and is, therefore, one of the most complete manifestations of SSLL that we know.

Evaluations of SSLL-like programs suggest that they have considerable promise for promoting positive student outcomes. They also show potential to enhance students' connection to school through caring and engaging classroom and school practices (McNeely, Nonnemaker, & Blum, 2002; Osterman, 2000) and they appear to be cost-effective (Aos, Lieb, Mayfield, Miller, & Pennucci, 2004). Theoretically, it is expected that (a) learning SSLL is similar to learning other academic skills (i.e., initial learning can be enhanced over time if children are reinforced in applying the skills to increasingly complex situations regarding health, social relationships, and academics), and (b) learning and skill acquisition are best accomplished through a combination of direct instruction, interactive approaches, and engagement in positive activities (Henderson, Karen, & Averett, 2002; Pittman, Irby, Tolman, Yohalem, & Ferber, 2001; Skinner, Kindermann, & Furrer, under review; Tobler et al., 2000), also characterized as sequenced, active, focused, and explicit (SAFE) (Durlak & Weissberg, 2007).

Potential Impact

Policy-makers, school administrators, and communities are trying to identify and support programs with proven efficacy for improving academic achievement and related outcomes. There is particular interest in programs that can positively impact racial/ethnic and poverty gaps in student learning and wellbeing, and also demonstrate effectiveness when delivered to students making the transition to adolescence and secondary-level schooling. However, most existing programs already identified as "proven" have yielded small effect sizes (Derzon & Wilson, 1999; Tobler et al., 2000; Tobler & Stratton, 1997; Wilson, Gottfredson, & Najaka, 2001) and these effects frequently have not been sustained (Flay, 2002; Greenberg, Domitrovich, & Bumbarger, 2001). Most of these programs are domain specific and few have been structured so that gains in personal, behavioral, and social domains translate into improvements in academic achievement. Given the relationships between student

values and character, social skills, emotional wellbeing, behavior, and academic performance, and because of the pressures of time on the school day, it would be beneficial to make available to schools coherent, school-wide SSLL programs that are easily and inexpensively implemented and that intentionally cultivate positive linkages of SSLL skills, concepts, and activities with achievement (Catalano, Oesterle, Fleming, & Hawkins, 2004; Flay, 2002).

The *Positive Action* Program

The Positive Action (PA) program was developed and revised by Carol Gerber Allred from 1977 to the present using continuous process monitoring and evaluation. It consists of training and materials for schools, families, and communities, and its content is based on three core elements – a philosophy, the thoughts–actions–feelings circle, and six content units. The PA program consists of a PreK-12 classroom curriculum, kits for school preparation and teacher training, school-wide climate development, a counselors kit, and parent and community involvement manuals. PA uses research-supported strategies and methods of education and behavior change, such as active learning, positive classroom management, social–emotional–behavioral and learning skills development, role-play, a detailed curriculum with almost daily lessons, school-wide reinforcement of positive behaviors, intrinsic motivation, and family and community involvement.

The first core element of the program is the *Positive Action* philosophy, which is grounded in a broad theory of self-concept (Combs, 1962; Purkey, 1970; Purkey & Novak, 1970). This theory posits that people determine their self-concepts by what they do; that actions, more than thoughts or feelings, determine self-concept; and that making positive and healthy behavioral choices results in feelings of self-worth/esteem. In accordance with recent theory and supporting research in "Positive Psychology" (Fredrickson, 2000; Seligman & Csikszentmihalyi, 2000), the program also assumes that when people feel positive about themselves, they will, in a reflexive manner, have more positive thoughts and engage in more positive behavior. This can be compared to the ABCD (affective–behavioral–cognitive–dynamic) model of Greenberg and Kusché's PATHS program (Kam, Greenberg, & Kusche, 2004). Positive emotions about self also may prove a superior method for regulating and mitigating negative emotions and their ill effects on self-control (Fredrickson, 2000, 2001; Izard, 1977; Lazarus, 1991).

The second core component of the program is the Thoughts–Actions–Feelings about self circle (Fig. 28.1). The content of the classroom curriculum, and all other components of the program, is based on the intuitive idea that "You feel good about yourself when you do positive actions and there is always a positive way to do everything." The Thoughts–Actions–Feelings about self circle illustrates this self-reinforcing process that is taught to students; showing them that thoughts lead to actions, actions lead to feelings about self, and feelings about self lead to more thoughts. The circle can be positive or negative.

Fig. 28.1 The Thoughts-Action-Feelings about Self Circle

Values are the key to everything we want to achieve. If we can get students to value being good, achieving, and contributing, then that is what they will be and do. *Positive Action* helps them do this by understanding that when they do good things they feel good about themselves. An important aspect of the TAF circle is whether there is a plus or a minus sign in the center that exemplifies good/right vs. bad/wrong. The way to achieve our educational goals is to help students come to value positive actions and to motivate them to engage in positive behaviors by understanding that they feel good about themselves when they do so. Cycles of positive or negative actions become habits, habits then become character, and character becomes destiny. As USA theologian, Tryon Edwards (1959) suggests, thoughts lead on to purposes, purposes go forth in action, actions form habits, habits decide character, and character ultimately fixes our destiny.

The aim of PA is to get everyone into the positive cycle by making positive choices consciously; this is intrinsically motivated change, where people choose to do positive actions to feel good about his or her self. Research strongly suggests that intrinsically motivated learning and behavior change are more likely to be sustained than extrinsically motivated learning or behavior change (Deci, 2009; Deci, Koestner, & Ryan, 1999, 2001; Deci & Ryan, 1985; Gottfried, Marcoulides, Gottfried, & Oliver, 2009; Ryan & Deci, 2000, 2006). Indeed, this process of change, involving teachers, students, other school staff, parents, and community members, allows participants to feel good about the change and about their involvement in it, an approach also recently found to be effective in large-scale school reform (Deci, 2009).

The third core component of the program is the actual content. The program teaches specific positive actions for the whole self: the physical, intellectual, social, and emotional areas. The content of all program components is taught through six units:

- Unit 1. Self-Concept: What it is, how it is formed, and why it is important (the PA philosophy and circle).
- Unit 2. Positive actions for body (physical) and mind (intellectual). For example, nutrition (including not using harmful substances), exercise, sleep, hygiene,

motivation to learn, thinking skills, problem solving, decision-making, creativity, curiosity, and study skills.
- Unit 3. Social and emotional positive actions for managing yourself responsibly. For example, self-management, self-control, managing personal resources like time, talent, energy, thoughts, actions, feelings, money, and possessions.
- Unit 4. Social and emotional positive actions for getting along with others by treating them the way you like to be treated. For example, with respect, empathy, kindness, fairness, cooperation.
- Unit 5. Social and emotional positive actions for being honest with yourself and others. For example, taking responsibility for telling self and others the truth, admitting mistakes, not blaming others or rationalizing, doing what you say you will do, knowing your strengths and weaknesses.
- Unit 6. Social and emotional positive actions for improving yourself continually. For example, setting and achieving goals, believing in potential, having the courage to try, turning problems into opportunities, persisting, and broadening horizons.

Together, these make up the comprehensive set of skills for successful learning and living (SSLL). The program trains teachers and parents to identify, teach, and reinforce positive thoughts, actions, and feelings about themselves by students and others in the school, leading to continual reinforcement of positive actions and enhanced student bonding with parents and school, consistent with multiple social learning theories (Akers, 1977, 1998; Bandura, 1977, 1986) and other current theories about and approaches to social development, health promotion, and prevention of unhealthy behaviors (Flay & Petraitis, 1994; Flay et al., 2009; Hawkins & Weis, 1985; Peters & McMahon, 1996). Research supports the program's focus on positive emotions and actions, showing, for example, that children who display empathy and sympathy and are sensitive to the wellbeing of others, also act pro-socially in other respects, even altruistically (Eisenberg & Fabes, 1998; Izard et al., 2000). Self-consistency becomes moral when our understanding and reasoning about social issues/problems becomes related to our feelings about ourselves and motivations to act responsibly; when we intend to do right (Blasi, 2004; Higgins-D'Alessandro & Power, 2005).

All components of PA are based on the same content that is taught through the six unit concepts, the SSLL. Students coming from less effective homes (disadvantaged, high-risk, low parenting skills) have fewer of these skills and need to have them taught. Standard education does little to compensate for lack of skills – they mostly teach the same way to all students regardless of student readiness to learn. Even students from homes where these skills are taught need to have them reinforced in school. Teaching these skills provides an opportunity for disadvantaged students to catch up and for students with the skills to practice and improve them (Freire, 1976; Noguera, 1995). In Unit 4 of the program, participants are asked how they like to be treated. Regardless of age, socioeconomic status, gender, or culture, students and adults all over the world suggest the same top values of respect, fairness, kindness, honesty, understanding/empathy, and love, consistent with others' findings (Nucci,

2001). These values, or ways people like to be treated, are then adopted as the code of conduct for the classroom and school.

This broad-based approach engages students because the topic is about their self-empowerment – who they are, who they can become, and how they can be someone admirable. By building in relevance, *Positive Action* provides a foundation of strong, proactive behavior, character development, and academic achievement (see boxed text below). Students gain social and emotional maturity and sound decision-making skills – aspects of a positive character that easily translate into active citizenship.

The New Essential ABC's: Academics, Behavior, and Character

How Positive Action Works for ***A***cademics: *Positive Action* creates an intellectually stimulating learning environment and helps students retain academic lessons by applying them to real-life situations. The lessons also inspire students to value learning and education, and to engage in setting personal goals for a happy and successful life. Thus, disciplinary referrals and drop-out rates decline and graduation rates improve. A counselor at a California middle school reported that *Positive Action* lessons and academic subjects are a powerful combination. "The student-teacher connection deepens," she said. "*Positive Action* gives a platform to address behavior and give positive feedback, and allows teachers to tie academic content into the lessons."

How Positive Action Works for ***B***ehavior: *Positive Action* is an effective tool for teachers to use for behavior management. By teaching the Thoughts–Actions–Feelings Circle, students become empowered to take control of their behavior in an intentional and deliberate way. Traditionally, educators focus on the *act* itself without considering the *thought* that precedes the *action* and the relationship of the *act* to the *feeling you get about yourself* that follows. Once students understand the role and importance of all three parts of the circle – thoughts, actions, and feelings about self – they become skilled and motivated managers of themselves, freeing the teacher to focus on academics.

How Positive Action Works for ***C***haracter: The Thoughts–Actions–Feelings Circle also helps students develop a positive character by teaching how important their values are to all aspects of their lives – including education. When you add positive (right or good) or negative (wrong or bad) to the circle, you are adding values to the behavior process. If you value positive actions, you do them; if you do not value positive actions, you do negative actions. The goal is to help students value positive actions, like learning to achieve academically and becoming a good person, so that they can achieve success and happiness – or feel good about who they are, how they treat others, and what they are doing with their lives.

As discussed earlier, broad and long-term effectiveness in improving both school performance and other desired student outcomes requires addressing more distal influences on behavior in a holistic way. The PA program attempts this with a holistic approach to school reorganization, teacher–student relations, parent and community involvement, instructional practices, and development of the self-concept of all parties (students, teachers, parents, and community members). The goal is for students and adults to gain not only the knowledge, attitudes, norms, and skills that they might gain from other programs, but also improved values, self-concept, family bonding, peer selection, communication, and appreciation of school. PA is designed to affect more distal (and more fundamentally influential) influences on school climate and student behavior and performance. The expected result is improvement in a broad range of behaviors (both negative and positive), emotional wellbeing, and school performance.

Figure 28.2 presents a logic/theoretic model for the PA program when delivered in schools. The most direct and immediate impact of the implementation of the program's different components is to increase the amount and quality of social/emotional and character development activities used by the school (see School & Classroom SSLL Practices). The school climate component leads to changes in school-wide activities such as reinforcement and recognition of positive

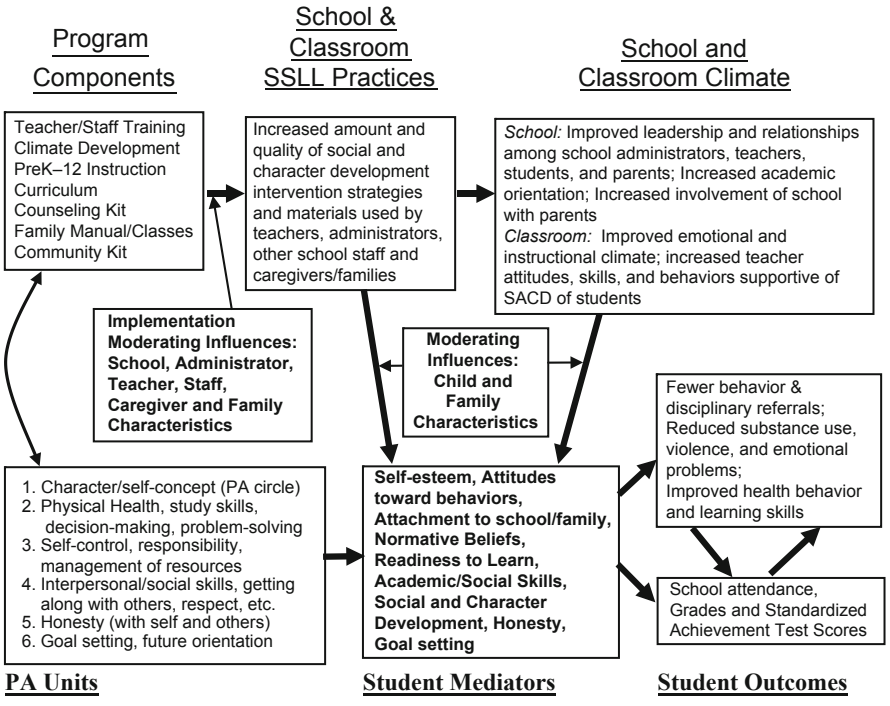

Fig. 28.2 Logic/Theoretic model of the effects of the *Positive Action* program

behavior and character attributes demonstrated by students, as well as assemblies and other events that focus on SSLL. The family involvement component leads to changes in opportunities for family involvement with the school focused on SSLL, as well as positive increases in the discussion and utilization of SSLL principles in school–parent and parent–child relations. The teacher/staff training promotes more effective implementation of classroom curriculum and also contributes to greater integration of SSLL activities, materials, and concepts into classroom management and instructional strategies as well as parent–teacher relations. The classroom curriculum contributes to greater amounts and quality of dedicated classroom instruction in SSLL knowledge and skills in areas that are the focus of the six Units of PA. Implementation of the program components and, thus, effects on SSLL activities in the school, is moderated by school/administrator, teacher/staff, and family characteristics. Enhanced SSLL, in turn, impact student social and character development and supportive attitudes and skills (see Student Effects) both directly and through improvements in relevant facets of the school and classroom environment (see School Climate and Classroom Climate; for ease of exposition and presentation we include effects involving families under school climate). Child and family characteristics moderate the strength and pattern of these impacts of SSLL activities. Improvements in student social and character development and supportive areas then yield both reductions in student behavioral and emotional problems and gains in school attendance, grades, and test scores, with impacts in these two domains mutually facilitating one another.

Prior Evaluations of Positive Action Programs

Many schools and districts around the world have experienced success with the "Positive Action Program." See boxed text below for one anecdote. Proof of effectiveness requires more than anecdotes and, fortunately, PA has been researched and evaluated in many different kinds of schools by the program's developer, school districts, and third-party evaluators.

A California Success Story

Some schools are striking a balance without compromising academic achievement goals. In fact, schools using *Positive Action* are finding that their students are not only learning for life, but exceeding their academic benchmarks as well.

Allan Petersdorf faced this curriculum dilemma when he became the principal of Discovery Bay Elementary School in 2005. The school's Academic Performance Index (API) was at 753; he knew that he was expected to at least reach his state's goal of 800. He also knew that students need more

than just reading and math skills for a successful, engaged life. He found the happy medium when his teachers attributed recent improvements in behavior and academics to *Positive Action*, which they had been using since 2003. Mr. Petersdorf embraced the program, concluding that it was the missing link between academics and learning for life. "I've used other character education programs in the past and they have all been beneficial," said Mr. Petersdorf, "but *Positive Action* goes beyond character education and that's what we were looking for."

Since then, Discovery Bay API scores have been steadily rising: to 772 in 2006, 816 in 2007, and 839 in 2008. Equally intriguing to Mr. Petersdorf, however, were the changes in student behavior. They are participating in class, demonstrating good character, and engaging in civic activities.

One particularly impressive activity began when a 4th grade student, Tyler Page, took what he learned in class from *Positive Action* and applied it to a real-world cause. While watching an Oprah Winfrey television episode, Tyler learned that children in Ghana were sold into slavery, where they suffered from backbreaking work, violent beatings, and malnutrition. He challenged his classmates: "Let's team up and show others how *Positive Action* in your community can change lives. Wouldn't you like to BE the difference and be a hero? Together as a team we can do it." He spearheaded a carwash fundraiser with friends and parents in order to buy a child's freedom for 1 year for $240. The fundraiser was a success, raising over $50,000 in 17 months, and altering the lives of over 200 children. This success inspired his family and friends to start their own non-profit organization, Kids Helping Kids Leadership Academy, Inc. (http://www.kidzhelpingkids.org).

Discovery Bay Elementary School is one of many success stories from schools that have experienced the beneficial effects of *Positive Action* for over 26 years in more than 13,000 schools and districts around the world. However, educators need to see the science behind the stories, and *Positive Action* has that, too.

During the late 1990s, the authors collaborated to conduct matched-control group studies on archival data from three school districts that used the PA program during the 1990s (Flay & Allred, 2003; Flay et al., 2001). For two school districts in Hawai`i and Nevada that had used PA in a significant number of elementary schools for several years, we used School Report Card (SRC) data on poverty (a major predictor of achievement) and mobility (a strong predictor of disciplinary problems) to match each PA school with the best-matched schools with similar ethnic distribution (Flay et al., 2001). We then analyzed the difference between PA schools and matched controls using ANCOVA, controlling for the matching variables, and testing for interactions between covariates and PA. Analyses of school-level data from the 1995–1996 and 1996–1997 school years in Nevada found that PA schools scored 16% better than non-PA schools (53.9 vs. 46.4) in their percentile ranking

of 4th grade achievement scores; reported 85% fewer incidences of violence; and reported 4.5% lower rates of absenteeism. All of these differences were statistically significant and equal in schools with high vs. low minority populations and mobility. We found similar results using 1995–1998 data from Hawai`i (Flay et al., 2001).

In subsequent research with a large Southeastern school district, we expanded the variables on which PA and non-PA schools were matched to include outcome variables (achievement) assessed before the introduction of PA (Table 2 in Flay & Allred, 2003). Findings were very similar to those reported from Nevada & Hawai`i – for example, 45% improvement in Florida Reading Test scores and 68% reduction in violence-related disciplinary referrals (Table 3 in Flay & Allred, 2003).

*Hawai`i RCT*: With support from the National Institute on Drug Abuse of NIH, the first author and his colleagues conducted a school-based randomized trial of the PA program in 20 K-5 schools in Hawai`i. Using SRC data, we stratified the eligible schools into strata ranked on a "risk score" comprised from multiple demographic variables, characteristics of the school and indicators of student behavioral and performance outcomes. We randomly selected schools from within strata and randomly assigned them to program or control conditions before recruitment. The study sample consisted of two cohorts of students (Grades 1 and 2 at pretest in 2000–2001 through to Grades 5 and 6 by the wave 5 follow-up in 2004–2005), their parents, their teachers each year of the study, and all other teachers and staff in project schools. In the spring of each year we surveyed the two cohorts of students and their teachers and parents, and all other teachers in all study schools. We also asked teachers of cohort students in both PA and control schools to rate the behavior of their students on approximately 70 behavioral items. We did not follow students who left project schools and we added students who entered project schools during the study.

The program developer (C.G. Allred) and the local PA Implementation Coordinator provided annual teacher and staff training to each school in the program condition — 1 day in the first year and a half day in subsequent years. In addition, we provided support for teachers and staff during the entire study period through individual consultation with the PA Implementation Coordinator. This person also provided regular consultation with Principals to ensure that the PA curriculum and other program components were implemented in adherence to the guidelines established by the program developer. Finally, to enhance implementation fidelity, we brought school leaders and selected teachers from all PA schools together for a workshop each year to share experiences and learn from the developer and each other.

There was variability between schools on a range of implementation indices, especially in Year 1, with improvements over time. By Years 3 and 4, two schools were still implementing at a low level, three at a moderate-to-high level, and five at a high level. Through interviews of school leaders and systematic observation of classrooms and schools we found that control schools reported implementing an average of 10.2 SSLL programs compared with 4.2 – in addition to PA – in the program schools. Teachers in control schools spent an average of 108 min/week on SSLL-related activities. PA school teachers spent the expected amount of time

on PA (55.1 min/week), yet, overall they still spent only 35 min/week more on SSLL-related activities than teachers in control schools. Control schools reported that teachers were involved in SSLL-related activities for an average of 24 weeks per school year. In contrast, teachers in PA schools reported delivering PA almost every week of the school year as well as being involved in other SSLL-related activities for 25 weeks/year. Both PA and control school teachers reported receiving training to implement approximately half of the SSLL-related programs (52.3 and 53.3%, respectively) that they reported implementing other than PA (100% trained).

For his dissertation, Michael Beets conducted some analyses of the predictors of program implementation and the links between implementation, dosage, and outcomes (Beets & Flay, 2007; Beets et al., 2008; Beets, Vuchinich, Acock, Allred, & Flay, 2007). He found that level of implementation was influenced by school principal attitudes and support, and teacher attitudes about SACD activities in general and PA in particular. In turn, level of implementation predicted student reports of exposure to the program elements. Student attitudes influenced student involvement in the program. Student exposure and involvement were related to student outcomes.

At 5th grade, we asked students from whom we obtained active parental consent (76.7%) about substance use (SU), violence, and sexual behaviors. We used multilevel logistic regression to compare never and ever engaging in SU or violence. Students in PA schools were 43% less likely than students in control schools to have engaged in SU behaviors (22.7 vs. 40.7%), 51.9% less likely to have engaged in serious violence behaviors (16.9 vs. 35.1%), and 63% less likely to have engaged in sexual intercourse by Grade 5 (2.4 vs. 6.5%) (Beets et al., 2009). Each of these effects was statistically significant; indeed, differences for each of the individual behaviors (e.g., smoking, drinking, using drugs) were also statistically significant. Teacher reports of substance use and violence were also statistically significant.

School-level data also showed substantial positive effects of PA (Snyder et al., 2010). For school-level data regarding average daily absences and percent proficiency in Grade 5 reading and math, we conducted growth curve analyses to examine rates of change. In all cases, there were no significant differences between PA and control conditions in intercept (baseline), but significant differences in slope, all indicating reduced absenteeism or better performance (e.g., academic test scores) for PA schools compared with control schools. Average daily absences in PA schools decreased compared to remaining stable in control schools, with 9.8 days absent on average in PA schools by 2005 vs. 11 for control schools. Over the three academic years PA schools experienced greater gains in both math and reading percent proficiency, in comparison to control schools. PA schools achieved 26% proficiency in math, for example, compared to 21% in control schools during 2005, up from 15 to 14% in PA and control schools, respectively, in 2002. State means also improved over this period as a result of NCLB and other efforts, and the gap between state means and control schools increased over time, while the gap for PA schools narrowed. These data demonstrate yet another reason for smaller than expected effect sizes in current prevention and SSLL studies – we are trying to row faster than the prevailing current (Hulleman & Cordray, 2009)!

The school district conducts School Quality Surveys (SQS) of students, teachers, and parents every 2 years and makes the data available at the school level. Parent ratings of parent involvement were significantly higher in PA schools (70.4% positive response) than control schools (67%) in 2005 compared with 68.8 and 68.4% in 2002. Parents also thought that PA schools had improved "sustained and focused action," "professionalism and system capacity," "student safety and wellbeing," and "satisfaction" significantly more than did parents of students in control schools (ESs 0.32–0.9). Student ratings of PA schools improved significantly more than student ratings of control schools for "Quality of student support" and "coordinated team work" (ESs 0.89–1.08). Teacher ratings significantly improved more for PA than control schools for "coordinated team work," "responsiveness of the system," "involvement," and "satisfaction" (ESs 0.23–0.75) (Flay, Acock, Vuchinich, & Beets, 2006).

Chicago RCT: The Institute of Education Sciences of the U.S. Department of Education sponsored the Social and Character Development (SACD) cooperative agreement, and Chicago was selected as one of seven sites nationwide evaluating the effects of seven different school-based interventions designed to promote children's social and character development using a matched-pair, school-based, randomized controlled trial. Similar procedures to those used in Hawai`i were used to select, match, and randomly assign schools to conditions (Ji, DuBois, Flay, & Brechling, 2008). University of Illinois (UIC) and Oregon State University (OSU) investigators/staff collected data in 14 K-8 Chicago Public Schools (7 PA schools and 7 control schools) beginning in September, 2004, and continuing through June, 2007. The data collection instruments used to assess program impact included a battery of multi-site surveys (administered by the multi-site contractor, Mathematic Policy Research [MPR]) given to children, parents, teachers, and school administrators at all sites, along with site-specific (administered by local staff) surveys of students more aligned with proximal outcomes of PA. We followed one cohort of students (N ~ 600) – those in Grade 3 in the 2004–2005 school year – surveyed at baseline (fall 2004) and in subsequent waves over a 3-year-period (spring 2005, fall 2005, spring 2006, and spring 2007). Response rates for the Teacher Reports were high in all four waves of data collection, with 85–100% of teachers returning surveys.

Training and technical support were similar to those provided in Hawai`i. In addition, to enhance implementation fidelity, we held a workshop with cohort student teachers each year. As with the Hawai`i study, we assessed program implementation with multiple instruments. By the use of extensive reminders and incentives, we obtained Weekly Implementation Reports from 59% of teachers, and 75% submitted reports at the end of each unit. Similar to the Hawai`i study, there was variability between schools in all of the above implementation indices, especially in Year 1, with improvements over time. By the end of Year 3, one school was still implementing at a fairly low level, four at a moderate level, and two at high levels. From these two trials, we have learned that it takes much more time for many low-performing schools to fully adopt and implement a comprehensive program than it did in prior years. Along with other comprehensive program developers and

researchers (e.g., Schaps, Slavin), we believe that many under-performing schools need 3–7 years to fully adopt and implement a comprehensive program.

At each wave, students were surveyed using both the multi-site and site-specific surveys. Active parental consent was required for all aspects of the Chicago study and we have published one paper on our methods for obtaining a high return rate (Ji et al., 2006). We also asked teachers of cohort students to complete behavior checklists on each student in the cohort, asked parents/guardians of the cohort students to complete a survey on their children's behavior, and surveyed the 3rd–5th grade teachers and Principals in all 14 schools regarding issues such as school climate, instructional practices, and implementation of SSLL-related programs. We also conducted extensive assessments of program implementation, as discussed in the previous section. Along with student, parent, and teacher surveys, we collected data from school records on attendance, disciplinary incidents, and achievement at the school level.

MPR conducted analyses on the impact of programs on teachers' reports of using materials and strategies in their classrooms to promote social and character development goals. Importantly, these analyses showed that teachers in PA schools were significantly more likely than control teachers to report using programs and materials to promote social and character development; although control teachers also reported substantial use. For example, PA teachers were substantially more likely than control teachers to report that they engaged in activities for at least 1 hour/week to promote violence prevention/peace promotion (43.6% in treatment schools vs. 17.1 % in control schools, ES = 0.40), social and emotional development (51.3 and 14.7%, respectively, ES = 0.59), and character education (66.9 and 26.3%, respectively, ES = 0.53).

For substance use, violence, bullying, and disruptive behaviors, we analyzed counts of the number of behaviors in each category in which students reported having engaged, using three-level (i.e., students nested within schools within school pairs), overdispersed Poisson models (Li et al., under review). Findings indicated that students in the intervention endorsed 31% fewer substance use behaviors (incidence rate ratio [IRR]=0.69) and 37% fewer violence-related behaviors (IRR=0.63), 41% fewer bullying behaviors (IRR=0.59), respectively, compared to students in the control schools. A 27% reduction in reported disruptive behaviors (IRR = 0.73) was not statistically significant. These results replicate findings from the Hawai`i trial using the same type of study design and, importantly, extend evidence of its effectiveness to youth attending large urban school systems. The effects were a little smaller than those reported from the Hawai`i trial, probably reflecting the difference between 3 and 4 years of the program.

For other outcomes, preliminary latent growth curve analyses, with all standard errors adjusted for clustering of students within schools and baseline covariates included in the model, indicated evidence of emerging positive effects of PA on a substantial number of both local- and multi-site measures (Flay, DuBois, & Ji, 2007). All emerging effects were in a direction indicating favorable impact of the PA program, thus arguing strongly against the pattern of findings being due to chance. The majority of emerging effects were for measures that correspond to Student

Effects in our logic/theoretic model (Fig. 28.2) – social and character development and related skills and attitudes, which are expected to be precursors to more distal effects on academic, behavioral, and emotional outcomes ("Expected Impacts"). These findings indicated, for example, relative improvements in character and social development as well as reduced endorsement of negative values, normative beliefs favoring aggression, affiliation with friends engaged in bad behaviors, improved social competence/problem-solving, and greater reliance on positive vs. negative processes for self-esteem formation. We also found emerging effects on variables from this area of the model with direct ties to academics, including student engagement (vs. disengagement) with learning and school self-esteem (feelings of pride regarding school work). We also found evidence of some effects involving school and classroom climate, a pathway through which the PA program may impact student outcomes such as those just described. These include, for example, reduced negative orientation to school among students as well as increased parent–teacher involvement and positive parenting, as reported by parents. Although less prevalent, there were trends toward positive effects of PA on several measures of more distal student academic, behavioral, and emotional outcomes, including improvements in self-reported grades and improved life satisfaction. Teacher reports of improved student academic motivation/competence and decreased problem behavior were marginally significant by wave 5.

Discussion

Summary of Evaluation Results

Multiple quasi-experimental and experimental studies have demonstrated consistently positive effects of the *Positive Action* program on a wide range of outcomes, including student-level values, character, positive and negative behaviors, and school-level indicators of all of these plus attendance, disciplinary referrals, and academic achievement. The fact that these results have been obtained from multiple studies of different designs, using different measures, and conducted in different geographical areas with different populations of students and families, supports their robustness, reliability, and validity. Nevertheless, evaluations by researchers independent of the program developer are still needed to provide further evidence of the effectiveness of the program in real-world settings (Eisner, 2009; Flay et al., 2005; Gorman & Huber Jr, 2009; Valentine et al., under review).

The comprehensive results of the *Positive Action* program suggest that a single, well-designed SSLL program that is implemented with moderate to high fidelity can have positive effects on multiple behavioral, character, and academic (ABC) outcomes. The multiple positive outcomes observed reinforce each other and so are likely to increase over time rather than decay as the effects of most programs do. Theoretically, changes in multiple domains are more likely to be maintained as

students develop; and programs that produce multiple outcomes are more likely to be sustained in schools, families, and communities.

Further Research Needs

Despite much previous research, we still do not have enough SSLL (or prevention or social and character development) programs that produce the kinds of effects we would like or that do all that theory suggests is possible. The PA program is one that comes close, in our estimation, to incorporating most of the factors that current theory and empirical data suggest for comprehensive SSLL. However, despite these characteristics and the positive results reported previously, we still know very little about how it actually works. Research on coherent, integrated SSLL programs is in an early stage. In addition to clarifying fundamental issues of program efficacy and effectiveness, it is crucial to establish more clearly how and why effective SSLL programs actually work. Theory and available research highlight several promising directions to pursue that could help to clarify (a) the most salient mechanisms of influence in SSLL interventions (i.e., mediators), (b) influences on integrity of program implementation, (c) the implications of differences in student exposure, and (d) which subgroups of students are most likely to be impacted by them (i.e., moderators). Such research could identify specific improvements to school-based SSLL preventive interventions that could improve their effectiveness in simultaneously decreasing adolescent health problems (substance use, violence, unsafe sex) and improving positive behaviors, academic achievement, and success in life.

Advancing the development, efficacy, effectiveness, and readiness for dissemination (Flay et al., 2005) of comprehensive SSLL programs requires a sound understanding of the intervening processes that mediate, or account for, the effects of these types of programs on academic achievement and other targeted outcomes. The first requirement is that such programs actually result in an increase in the amount and quality of SSLL intervention strategies and materials used by teachers, administrators, and other school staff. This is not necessarily a given because of the implementation difficulties that can threaten the integrity of program delivery. School-based SSLL programs appear to be most beneficial when they simultaneously improve the quality of the environments in which students are educated, as well as enhance students' personal and social assets (Catalano, Oesterle, et al., 2004; Eccles & Gootman, 2002; Flay, 2002; Weissberg, Greenberg, Sigel, & Renninger, 1997). A positive school environment should improve student character and self-esteem (Cauce, Comer, & Schwartz, 1987; Felner et al., 1993), reduce problem behavior (Battistich & Hom, 1997), and improve achievement (Bulach, Malone, & Castleman, 1995; Cauce et al., 1987). Evidence indicates that PA meets these objectives.

Delivering a SSLL program with integrity (i.e., high dosage and fidelity) is obviously of critical importance (Basch, 1984; Dane & Schneider, 1998; Durlak,

1998; Emshoff et al., 1987; Weissberg, 1990), since higher quality implementation creates the potential for stronger program outcomes (Domitrovich & Greenberg, 2000; Dusenbury, Brannigan, Falco, & Hansen, 2003; Harachi, Abbott, Catalano, Haggerty, & Fleming, 1999; Kam et al., 2004). A number of factors appear to influence teacher adherence: attitudes toward expected program outcomes, motivation to change child behavior, attributions of behavior change to the program, self-efficacy to deliver the program, level and quality of training, and leadership/principal support for the program (Beets et al., 2008; Fagan, Hanson, Hawkins, & Arthur, 2008; Han & Weiss, 2005; Kam, Greenberg, & Walls, 2003; Kealey, Peterson, Gaul, & Dinh, 2000; Rohrbach, Graham, & Hansen, 1993; Smith, McCormick, Steckler, & McLeroy, 1993). We used a combination of qualitative and quantitative data on teacher implementation of the PA program to inform and further develop a working model of influences on the amount and quality of teacher implementation of the curriculum and other classroom-based program components. Preliminary analyses have identified several factors that are influential in shaping integrity of teacher implementation. These include the extent to which teachers receive support from their principal, collaborate with and receive support from other teachers when implementing the program, teacher's own attitudes and beliefs regarding the need for schools to do SSLL, and the perceived likely effectiveness of the program (Beets et al., 2008).

Program fidelity is one obvious mediator of program effects. Prior research has also found factors that are important determinants of program fidelity. These include quality of school leadership (Alig-Mielcarek & Hoy, 2008; Kam et al., 2003), quality of relationships among school administrators, teachers, students, parents, and community (Catalano, Oesterle, et al., 2004; Comer, 1988; Juvonen, 2007; Wentzel, 1998), quality of teacher–student and student–student relationships (Pianta, Hamre, & Stuhlman, 2003; Wentzel, Barry, & Caldwell, 2004), time on task for academic learning and support for higher-order thinking (Anderman & Midgley, 1998; Lumsden, 1994), teacher's endorsement of and capacity to model positive social-emotional skills and behaviors (Davis, 2003), norms supportive of academic achievement (Brand, Felner, Shim, Seitsinger, & Dumas, 2003), and parental involvement (Griffith, 1998; Grolnick, Ryan, & Deci, 1991; Shaver & Walls, 1998; Walberg & Lai, 1999; Zellman, 1998).

At the school level, the most promising prevention programs positively impact school climate and these effects appear to promote better student outcomes (Adelman & Taylor, 2000; Greenberg et al., 2001; Griffith, 2000; Kuperminc, Leadbeater, Emmons, & Blatt, 1997; Roeser, Eccles, & Sameroff, 2000). Because the school climate effects of SSLL programs such as PA are most likely to accrue through school-wide program components (e.g., coordinating committee, assemblies, use of common terminology, reinforcement of positive behaviors, involvement of parents), it is critically important to assess the integrity with which these activities are implemented and the factors that affect integrity. High levels of implementation integrity are necessary for individual students and classrooms of students within schools to receive high levels of exposure to program activities (i.e., dosage). Program effects typically appear greater when focusing on students with greater

levels of program exposure and participation. Selection effects (e.g., those teachers who are already prone to elicit positive student outcomes also tend to deliver the program at higher levels) may bias such analyses, although data analytic procedures such as propensity score analysis attempt to control for these types of confounds (Foster, 2003; Rosenbaum & Rubin, 1983).

Program fidelity and dosage received are not the only mediators of program effects on student outcomes. Other kinds of mediators of effects on student behavioral and academic outcomes are related to immediate program effects. For example, measures of self-concept/esteem (how people think and feel about themselves) have been correlated with both fewer problem behaviors and better academic performance (Beane & Lipka, 1980; Coleman et al., 1966; Filozof et al., 1998; Paulson, Coombs, & Richardson, 1990; Purkey & Novak, 1970; Symons, Cinelli, James, & Groff, 1997), though the causal ordering of these associations remains in question (Bandura, Barbaranelli, Carpara, & Pastorelli, 1996; Filozof et al., 1998; Hamachek, 1995; Hansford & Hattie, 1982; Hay, Ashman, & Van Kraayenord, 1998; Hoge, Smit, & Crist, 1995; McCarthy & Hoge, 1984; Purkey, 1970; Rigby & Cox, 1996; Scheff, Retzinger, & Ryan, 1989). Emerging research underscores a need for interventions reflecting a better understanding of the potential relationships of self-esteem to achievement and related outcomes (DuBois, 2003; DuBois, Holloway, Valentine, & Cooper, 2002; DuBois & Tevendale, 1999; Hughes, Cavell, & Grossman, 1997). The PA program is highly aligned with recent theory and research on self-concept (DuBoise, Flay, & Fagen, 2009; Sebastian, Burnett, & Blakemore, 2008). Other mediating variables include the expected immediate or proximal effects of the units of PA, namely, attitudes toward physical health behaviors, learning and decision-making skills, self-regulation/management and responsibility, attachment to school and family, sociability and social skills, honesty, and goal setting.

Available findings from the prevention literature highlight the potential differential (moderated) effectiveness of programs for girls and boys as one important concern. In the areas of substance use and violence prevention, evaluations that have reported gender differences more often favor boys (Botvin, Baker, Filazzola, & Botvin, 1990; CEBP, 2002; DeJong, 1987; Farrell & Meyer, 1997; Flay et al., 2004; Flynn, Worden, Secker-Walker, Badger, & Geller, 1995; Graham, Johnson, Hansen, Flay, & Gee, 1990; Guthrie & Flinchbaugh, 2001; Kellam, Ling, Merisca, Brown, & Ialongo, 1998; O'Donnell, Hawkins, Catalano, Abbott, & Day, 1995; Perry et al., 2003). A second relatively robust pattern has been to find greater impact of prevention programs for youth exhibiting greater levels of risk (Muthen et al., 2002; Segawa, Ngwe, Li, & Flay, 2005; Stoolmiller, Eddy, & Reid, 2000; Wilson et al., 2001). To enhance the effectiveness of interventions for girls, programs may need to focus more on internal manifestations of risks (e.g., low self-esteem, confidence) and on fostering connectedness to school and family (CSAP, 2002; Guthrie & Flinchbaugh, 2001). In accordance with these recommendations, PA includes a focus on socio-emotional concerns relating to self-concept and efficacy beliefs as well as on promoting positive bonding to teachers/school staff, positive peers, and parents/family.

It is likely that the most salient and powerful sources of influence on the effectiveness of SSLL programs are combinations of factors such as gender and risk factors rather than any one moderator in isolation. A conventional approach to exploring higher-order interactions is impractical. An alternative is to first identify subgroups of youth who exhibit different trajectories of change or stability over time on selected outcome measures using growth mixture modeling (Muthen et al., 2002; Segawa et al., 2005). Differences between subgroups suggest moderation of program impact. Understanding moderators might provide insights on how some adjustment to SSLL can enhance the beneficial effects.

SSLL programs in general, and the *Positive Action* program in particular, include a strong emphasis on the development of moral values and character. Moral competence may be defined is a youth's ability to assess and respond to the ethical, affective, or social justice dimensions of a situation (Catalano et al., 2008). Moral maturity is considered as the combination of respect for rules and a sense of social justice (Piaget, 1965). Moral development has been discussed as a multistage process through which children acquire society's standards of right and wrong, focusing on choices made in facing moral dilemmas (Kohlberg, 1969, 1981). Others have said that the roots of morality are in empathy, or empathic arousal, which has a neurological basis and can be either fostered or suppressed by environmental influences (Hoffman, 1981). Fairness and welfare have been considered as central concerns for moral judgments (Nucci, 1997). Components of the *Positive Action* program address all of the foregoing definitions of moral and character development.

Comprehensive SSLL programs like the *Positive Action* program also provide instruction in and support of the multiple dimensions of Positive Youth Development (Catalano, Berglund, et al., 2004; Catalano, Hawkins, Berglund, Pollard, & Arthur, 2002; Flay, 2002; Lerner et al., 2005; Lerner et al., 2003). Catalano and colleagues (Catalano et al., 2008) also derived a list of 18 constructs addressed by Positive Youth Development programs. These included the fostering positive resilience, self-determination, self-efficacy, spirituality, positive identity, social competence; the development of social, emotional, cognitive, behavioral and moral competence; the promotion of social bonding, life satisfaction, and strength of character; and the provision of opportunities for pro-social involvement (and civic engagement) and recognition/reinforcement for positive behavior. *Positive Action* provides direct instruction in, opportunities for practice of, and support for all of these factors.

Conclusion

Values are key to comprehensive social and character development and positive youth development. Students, indeed all people, will do what they value or what is consistent with their values. A central aim of the *Positive Action* program is to get students to the point where they value being a good, productive, successful, and contributing member of society. The *Positive Action* program helps people understand that they feel good about themselves when they do good or right – and that provides

the intrinsic motivation to continue doing good and right. Abraham Lincoln, when asked about his religion, remarked that it was very much like that of an old man named Glenn in Indiana whom he had heard speak at a church meeting and who said, "When I do good I feel good; when I do bad I feel bad; and that's my religion" (Fehrenbacher & Fehrenbacher, 1996, p. 245). In some ways, this is a self-evident truth; however, in other ways, it is far from self-evident, especially in this modern world of political and economic scandals. Children and youth need to be taught what is good and right vs. bad and wrong. The *Positive Action* program does this in a way that is effective for both the students and their instructors and parents (and the rest of the community).

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The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Institute of Education Sciences, CDC, MPR, or every Consortium member, nor does mention of trade names, commercial products, or organizations imply endorsement by the U.S. Government.

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