In today’s schools, students and teachers feel unprecedented—even alarming—levels of stress. How can we create calmer classrooms in which students concentrate better and feel more positive about themselves and others? Author Thomas Armstrong offers a compelling answer in the form of mindfulness, a secular practice he defines as the intentional focus of one’s attention on the present moment in a nonjudgmental way.

In *Mindfulness in the Classroom*, Armstrong

- Explains how mindfulness affects the structure and function of the brain.
- Provides an overview of mindfulness as both a personal practice and a classroom methodology that aligns with such educational models as Social and Emotional Learning (SEL), Positive Behavioral Intervention and Supports (PBIS), and Universal Design for Learning (UDL).
- Shares and explains the extensive research that shows the positive effects of mindfulness practices in the classroom.
- Describes how to adapt mindfulness for different grade levels, integrate it into regular school subjects, and implement it schoolwide.
- Offers guidelines for teaching mindfulness responsibly, without religious overtones.

Dozens of observations from teachers, students, researchers, and practitioners provide striking evidence of the power of mindfulness and offer hope to anyone who wants to make classrooms more productive places of learning.
Mindfulness in the classroom : strategies for promoting concentration, compassion, and calm / Thomas Armstrong.

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Thirty years ago I took an eight-week class in mindfulness meditation from clinical psychologist Jack Kornfield, author of several bestselling books on mindfulness. At the time, I was in the midst of a major depressive episode and sought assistance from this practice in combating my mood disorder. After a few weeks of meditating, my depression gradually began to lift (research 15 years later would support the use of mindfulness meditation in effectively treating depressive illnesses like mine). Years later, as my practice became more sporadic, I had a relapse of my depression, and this time I was more careful and made sure to do at least 30 minutes of mindfulness practice each day. That was almost 10 years ago, and since then I’ve been depression free. I plan to practice mindfulness every day for the rest of my life.

Since that time, mindfulness has taken off as a popular method of personal and professional transformation. Thousands of studies conducted throughout the past 20 years have demonstrated the effectiveness of mindfulness in treating a wide range of disorders, including depression, anxiety, post-traumatic stress disorder, eating disorders, chronic pain, and even psychosis.

More recently the focus has turned to schools and well-designed randomized controlled studies are highlighting the value of mindfulness practices in improving students’ executive functioning, bolstering
working memory, supporting social and emotional development, and reducing stress levels. Although the scientific study of mindfulness in the schools is still in its infancy, with several long-term studies in progress and others planned for the future, there now is growing evidence supporting the use of mindfulness to enhance concentration, compassion, and calm in the classroom.

As I did the research for this book, I encountered the word *mindfulness* used in reference to a wide collection of interventions including mood lighting, relaxation strategies, jumping on a trampoline, stress-reducing coloring books, guided visualizations, chanting, and other body-mind activities. None of these are true examples of mindfulness—at least in the way that I’ll be using the term in this book. I also encountered confusion of the word *mindfulness* with the ideas of Harvard professor Ellen Langer (2014), who uses it in reference to thinking “outside of the box.”

In this book, I’ll be using the word *mindfulness* in a very precise way. Mindfulness, simply put, is the intentional focus of one’s attention on the present moment in a nonjudgmental way. The concept of mindfulness has roots in Buddhism, especially Theravada Buddhism, which is predominant in Southeast Asia. However, my own reference point for the secular foundation of mindfulness comes from the work of biologist Jon Kabat-Zinn (2013). In the 1970s at the University of Massachusetts Medical School, Kabat-Zinn developed a method for treating chronic pain and stress through an eight-week course that he referred to as Mindfulness-Based Stress Reduction (MBSR). The vast majority of scientific studies on mindfulness over the past two decades have been based on this program and a related one called Mindfulness-Based Cognitive Therapy (MBCT), which combines mindfulness experiences with standard cognitive-behavioral therapy. Although the application of mindfulness to the schools, and to students at different ages, requires many significant changes, adaptations, and modifications (these will be discussed in Chapter 6), many of the activities that I write about (especially those described in Chapter 3) owe their origins to Kabat-Zinn’s MBSR program and to my own experiences practicing mindfulness over the past 30 years.
It’s important for me to state from the outset that this book is not a formal program for implementing mindfulness in the schools or for formally training teachers to use mindfulness in their classrooms. There already are perhaps 30 to 40 programs that do this around the United States and in the United Kingdom and Australia (I list several of these in Appendix B). Such programs vary in the methods they use, the services they provide, and the philosophies they espouse, although most of them adhere to some version of Kabat-Zinn’s formulation of mindfulness. This book, on the other hand,

- Provides an overview of mindfulness both as personal practice and as a method to be used in the classroom.
- Details how mindfulness positively affects the brain’s structure and function, particularly in regard to its ability to deal with stress.
- Shows how mindfulness fits within existing education models such as Social and Emotional Learning (SEL), Positive Behavioral Interventions and Supports (PBIS), and Universal Design for Learning (UDL).
- Reviews current evidence-based research on the effectiveness of mindfulness for use in the classroom.
- Communicates many of the essential features of mindfulness programs and practices.
- Offers suggestions for how mindfulness can be adapted at different grade levels.
- Provides ways of integrating mindfulness into the regular school curriculum (e.g., in language arts, math, science, social studies).
- Suggests several ways in which mindfulness can be implemented on a schoolwide basis.
- Enumerates guidelines to ensure that mindfulness is taught in the schools in a responsible way (e.g., so that it doesn’t violate the separation of church and state in the U.S. Constitution).

The book is designed to meet a wide range of needs for educators with varying backgrounds and levels of experience. Mindfulness in the Classroom will appeal to several audiences, including
• Educators who are totally new to the subject of mindfulness, providing them with an overview and tools they need to start their own practice and immediately begin using mindfulness in their classrooms.

• Teachers who have begun using a few mindfulness practices in their classroom and want additional strategies and information for extending the practice.

• Teachers and administrators who have been using mindfulness in their classrooms for some time as part of a formal mindfulness program and are seeking ways to integrate mindfulness further on a schoolwide basis.

• Specialists who are working with at-risk kids or students in special education and want to offer emotional self-regulation strategies and provide activities that will improve executive functioning and reduce stress.

• School counselors and other support personnel who wish to add mindfulness to their toolkit in helping students with emotional and behavioral difficulties.

I want to reiterate that mindfulness is a completely secular practice if practiced in accordance with the guidelines discussed in this book (this issue will be explored in depth in Chapter 9). In researching this book, I was a bit alarmed to see the trappings of spirituality penetrating mindfulness practices in some public school classrooms, with kids sitting in the lotus position, using mudras (specific placement of the hands while practicing), listening to Tibetan singing bells, and even chanting and receiving “spiritual” instruction (e.g., “the God in me sees the God in you!”). Because the primary readers of this book will be public school educators, I cannot overemphasize the need to err on the side of secularity and make sure that religious or spiritual principles don’t seep into the practices. Although the courts thus far have ruled in favor of yoga and mindfulness in the schools (see, for example, Perry, 2015), careless practice will only sow confusion and controversy that could ultimately undermine the entire use of mindfulness in the schools.

My hope is that readers will develop a strong level of confidence in the power of mindfulness practices to open up new potential in their
students, leading to greater levels of social, emotional, and cognitive competence. As I point out in the first chapter, we’ve never experienced times as stressful as they are now, and mindfulness has emerged just in the nick of time to offer students relief and greater levels of resilience in dealing with the pressures associated with this fast-paced, technology-ridden culture of ours. Happy reading, and may all of your moments be mindful ones!
An epidemic is sweeping through our classrooms today. Not connected to a virus, bacteria, or any other pathogen, the malady is stress. Our students are experiencing stress at levels never before seen in the history of U.S. education. The statistics are alarming. Here are a few of them:

- One in 10 preschoolers has had suicidal thoughts (Whalen, Dixon-Gordon, Belden, Barch, & Luby, 2015).
- Doctors are increasingly reporting children in early elementary school suffering from migraine headaches and ulcers, and many physicians see a clear connection to pressure related to school performance (Abeles, 2016).
- A third of our adolescents report feeling depressed or overwhelmed because of stress, and their single biggest source of stress is school (American Psychological Association, 2014).
- Roughly 1 in 4 girls and 1 in 10 boys in U.S. high schools try to harm themselves even when they are not attempting suicide (Monto, McRee, & Deryck, 2018).
- In a Yale University survey of more than 22,000 high school students, teens reported feeling stressed 80 percent of the time in school (Brackett, 2016).
- By age 21, according to one longitudinal study, 82.5 percent of our students will have met the criteria for at least one psychiatric...
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disorder (Copeland, Shanahan, Costello, & Angold, 2011). (No, this is not a misprint.)

Student stress occurs at all levels of the socioeconomic pyramid. Dale Caldwell, former head of school at the Village Charter School in Trenton, New Jersey, uses the phrase “urban traumatic stress disorder” to describe the problem among those living in poverty. A consultant at the school, Trish Miele, talks about the anxiety that plagues these inner-city students: “So much of their life is living on the edge of stress. . . . It could be food insufficiency, it could be general safety, not having a home, it could be abusive. . . . So many things are coming at them in the urban environment” (Buffum, 2017). On the other end of the economic spectrum, students are under tremendous pressure to perform academically. Reflecting on her experience teaching 3rd grade in the wealthy West Windsor–Plainsboro public school district for 10 years, Miele comments, “The district is very high-achieving. . . . I would have kids coming to me when we started doing testing, [saying], ‘If I don’t do well, I won’t get into Princeton!’ And I’m like, ‘You’re eight. What are you worrying about?’” (Buffum, 2017).

The Mindful Solution to Stress

Fortunately, schools are beginning to respond to this epidemic of stress. One intervention that has received a great deal of attention over the past few years is mindfulness: the nonjudgmental awareness of each present moment in time. Although rooted in a thousand-year-old Buddhist tradition, mindfulness was given a solid secular foundation in science through the efforts of biologist Jon Kabat-Zinn, founder of the Stress Reduction Clinic at the University of Massachusetts Medical Center. He created a stress-reduction and chronic pain management program in the early 1970s based upon mindfulness (Kabat-Zinn, 2013). Since that time, more than 3,000 scientific studies have addressed the topic of mindfulness (Regents of the University of California, 2014). These studies have demonstrated the effectiveness of mindfulness practice in treating chronic pain (Garland et al., 2017); high blood pressure (Palta et al., 2012); immune function (Davidson et
al., 2003); anxiety (Vøllestad, Sivertsen, & Nielsen, 2011); depression (Kuyken et al., 2008); post-traumatic stress disorder (Possemato et al., 2016); eating disorders (Katterman, Kleinman, Hood, Nackers, & Corsica, 2014); psychosis (Aust & Bradshaw, 2017); substance abuse (Bowen et al., 2014); and a host of other mental and physical ills.

### Mindfulness in Popular Culture

As a result of such a strong evidence base, mindfulness has entered popular culture in the United States (as well as in the United Kingdom and Australia). The mindfulness and meditation industry has become a one-billion-dollar-a-year business (Wieczner, 2016). Close to 80 percent of all medical schools in the United States offer some aspect of mindfulness training in their programs (Barnes, Hattan, Black, & Schuman-Olivier, 2017). The National Health Service in the U.K. lists mindfulness as one of its five steps to mental well-being (National Health Service, 2016). Chris Ruane, a member of the British Parliament, has set up a mindfulness training group for its MPs (Booth, 2017), and U.S. Representative Tim Ryan of Ohio has authored a book on mindfulness (Ryan, 2012) and promoted its widespread use among the American electorate.

These examples are just part of the mindfulness revolution. In addition, the U.S. Army has instituted a mindfulness program—Mindfulness-Based Mind Fitness Training (MMFT, pronounced “M-fit”)—to improve mental performance and bolster the emotional health of soldiers under the stress and strain of war (Myers, 2015). The National Basketball Association (NBA) has teamed up with Headspace, a leading mindfulness app, to provide mindfulness training to all league and team staff and family members (NBA Communications, 2018). Mindfulness training is used in several Fortune 500 companies, such as Nike, General Mills, Goldman Sachs, Google, and Apple (Levin, 2017). Even Sesame Street is using mindfulness principles. In one video created by the Children’s Television Workshop, the Count teaches Cookie Monster how to concentrate on his breathing to reduce stress (to watch it, go to https://sesamestreetincommunities.org/activities/count-breathe-relax/).
The Growth of School-Based Mindfulness Programs

The first major effort to use mindfulness in the schools began in the United Kingdom in 2007 with a series of uniform lesson plans delivered in classrooms across the country (Davis, 2015). Over the past decade, several other programs have emerged to deliver mindfulness training in classrooms around the world. They include Mindful Schools, MindUP, Calm Classroom, Inner Explorer, Master Mind, Moment, A Still Quiet Place, Mindful Schools, the Attention Academy, Inward Bound Mindfulness Education, and Learning to Breathe (see Appendix B for contact information on these and other mindfulness programs). MindUP reports reaching over 500,000 students around the world in the past decade, and Mindful Schools says it has reached over 300,000 students in the United States in the past five years (Strauss, 2016).

Although alike in embracing mindfulness, these programs vary considerably. Some offer discrete training classes, whereas others use whole-school or even districtwide immersion models. Program duration runs from four weeks to several years. Some use external facilitators to teach mindfulness, others train a school’s teachers to provide these lessons, and still others use no facilitators at all, relying upon audio and video recordings to guide mindfulness sessions. Evaluations of these programs reveal successful implementation, high recruitment and retention rates, positive qualitative feedback from teachers and students, broad program dissemination, and long-term sustainability (Semple, Droutman, & Reid, 2017).

What the Research Says About Mindfulness

A number of school-related research projects are currently underway to gauge the long-term effectiveness of mindfulness training in students. The Jefferson County Public Schools in Louisville, Kentucky, has partnered with the University of Virginia to implement the Compassionate Schools Project, a seven-year, $12 million research project based on
mindfulness principles (Marshall, 2017). In the United Kingdom, the University of Oxford has teamed up with University College London and the Medical Research Council in another seven-year project to study the application of mindfulness practice with adolescents in the schools, at a cost of $7.5 million (Mundasad, 2015). In Chicago, the Erikson Institute, a developmentally based graduate school, has been given $3 million by the U.S. Department of Education to study the effectiveness of mindfulness at 30 high-poverty schools encompassing more than 2,000 students in kindergarten through 2nd grade (DeRuy, 2016).

Along with these longitudinal programs, there’s been a tsunami of short-term studies on using mindfulness in the schools. These have offered preliminary evidence of the effectiveness of mindfulness with respect to a wide range of important skills necessary for school success, including

- Executive functioning (Flook et al., 2010).
- Sustained attention (Gu, Xu, & Zhu, 2018).
- Social and emotional development (Schonert-Reichl & Lawlor, 2010).
- Improved math performance (Schonert-Reichl et al., 2015).
- Self-regulation (Viglas & Perlman, 2018).

Interestingly, two of these studies (Flook et al., 2010; Viglas & Perlman, 2018) indicated that mindfulness practices were especially effective with students who had difficulties with executive functioning or self-regulation. Similarly, mindfulness appears to be very effective on a number of levels for low-income minority students in urban settings. One randomized controlled study, for example, published in the prestigious journal Pediatrics, showed improvements in urban, at-risk middle school students with respect to somatization (having medical symptoms without any known cause), depression, negative affect, negative coping, rumination, self-hostility, and post-traumatic symptom severity (Sibinga, Webb, Ghazarian, & Ellen, 2016).
There is also emerging research suggesting that mindfulness practices benefit students with special needs. One study of adolescents with autism who went through nine weeks of mindfulness training saw decreases in rumination, as well as improved social responsiveness, social communication, social cognition, and social motivation (de Bruin, Blom, Smit, van Steensel, & Bögels, 2015). A review of several recent studies concluded that mindfulness may prove to be a novel psychosocial intervention for students with ADHD (Cassone, 2015). Mindfulness has shown effectiveness with a group of adolescent psychiatric outpatients displaying a heterogeneous mix of emotional and behavioral disorders. Those students engaged with Mindfulness-Based Stress Reduction (MBSR) self-reported reduced symptoms of anxiety, depression, and somatic distress, and increased self-esteem and sleep quality. Of clinical significance, the MBSR group showed a higher percentage of diagnostic improvement over the course of the five-month program (Biegel, Brown, Shapiro, & Schubert, 2009). A study of students with intellectual disabilities showed that mindfulness practice led to improved task performance and reduced task avoidance (Kim & Kwon, 2018).

As of 2019, there have been three separate meta-analyses of the existing literature on mindfulness in the schools. Although meta-analyses can produce watered-down data due to differences among the studies analyzed, they can also be useful in determining the overall effectiveness of an intervention across a wide range of studies (see Ahn, Ames, & Myers, 2012, for a discussion of strengths and weaknesses of meta-analyses in educational research). In the first meta-analysis, which included 19 studies using control groups (Zenner, Herrnleben-Kurz, & Walach, 2014), overall effect sizes within and between groups was .40 and .41 respectively (using Hedges’ g, a measure of effect size). An effect size of .40 is considered to be within the range of desired intervention effects, according to Hattie (2008). The meta-analysis also looked at specific components of desired effects and found a large effect size (.80) in cognitive performance among students in mindfulness studies.

A second meta-analysis (Maynard, Solis, Miller, & Brendel, 2017) demonstrated a small, statistically significant positive effect on
cognitive and socioemotional outcomes from mindfulness practices in the schools but no significant effect on academic and behavioral outcomes. A third meta-analysis (Klingbeil et al., 2017), examining 76 studies involving 6,121 participants, found small positive effects (.32 in controlled studies), which surprisingly became stronger at follow-up (.46), suggesting that mindfulness has a cascading effect long after the study has ended.

Taken as a whole, these studies suggest small to moderate positive effects due to mindfulness-based practices in the schools. We must keep in mind, however, that the research on mindfulness in education is still in its infancy, and future studies will help to illuminate which factors are most potent in initiating positive effects on students’ emotional well-being, cognitive performance, and academic achievement. Future studies also promise to indicate which interventions are most effective with specific groups of students.

Teacher and Student Testimonials for Mindfulness

Another way to gain insight into the benefits of mindfulness in schools is to listen to the teachers who are implementing these practices. Laura Markus, 6th and 7th grade math teacher at Dunn Middle School in Los Olivos, California, reports that the school schedule “can be chaotic for some students. They often come to my classroom after science class, where they may still be excited from setting something on fire just minutes before. . . . Taking a few minutes for quiet meditation at the beginning of each class serves as a transition for students to get into a different mindset for learning the logic of math” (Dunn School, 2018). Jana Standish, school counselor at Colrain Central School in Colrain, Massachusetts, who leads mindfulness sessions for elementary school students, comments, “Children have so many activities—things they’re expected to learn and memorize. They’re taking in so much information . . . just taking a little time to pause and feel your breathing is helpful” (Broncaccio, 2018). Intervention teacher Stacey Achterhoff, who has worked with K–5 homeless students in the Duluth Public Schools in Minnesota, says,
There were just so many layers of yuck to get through before we could get to academics. . . . If we don’t address the trauma, then the kids are going to become stunted in academic growth. . . . When I go into the classroom, I see that quiet magic of kids being able to settle into their own bodies. . . . They see there’s power in being able to control what they can, when there are so many other things out of their control. (Zalaznick, 2017)

We can also learn from the students themselves about the impact that classroom-based mindfulness has had on their lives. One high school student who had participated in a mindful self-compassion program for adolescents said this:

Mindfulness has helped me focus because every day, I have like 20 pages to read in APUSH and APES [AP U.S. History and AP Environmental Science], and somehow right now it is hard to get reading, and every day I would come home and think “I don’t want to do this,” and so I wouldn’t, but if I sat down and focused only on this and nothing else then I got it done and it didn’t even take that long. So I actually like meditating and . . . focusing on my breath, because it helped me focus on my schoolwork. (Bluth, Gaylord, Campo, Mullarkey, & Hobbs, 2016, p. 485)

Another high school student involved in a mindfulness study of an alternative high school program reported, “When we started meditation, it seemed that I would get angry and stay angry, but now it seems when I get angry, I calm down quicker” (Wisner, 2014, p. 632). In Baltimore, Maryland, Patterson High School student Chris Bowman commented on the effect mindfulness has had on him personally:

Growing up without a father and stuff like that, I struggled with a lot of depression, a lot of grief, and a lot of just really bad—really bad zones of like suicidal thoughts. But I had to find a way to get out of that. A mindful moment is when you—you just take a deep breath in a moment of conflict and just—maybe you just look at that and just like, I can do this in a different way. I don’t have to fight this person. I don’t have to look [to] violence as the answer. (PBS NewsHour, 2017)
How Mindfulness Fits Within Existing Education Programs

Some teachers may think of mindfulness as just another program they have to squeeze into an already overcrowded school day. Rather than reducing stress, they believe, this extra “burden” added to their teaching load will only make them feel more stressed. Lynley Schroering, principal of Luhr Elementary in Louisville, Kentucky, responds to this concern by commenting, “Sometimes we feel like we don’t have time to deal with all of those kinds of emotional issues with kids, but if we don’t deal with those and build those relationships and have kids feel safe, they really can’t learn. If kids don’t feel safe and supported, then no learning is going to take place” (Wagner, 2018). “A teacher may think, I can’t add another thing to my day . . . ,” says Amy Saltzman, director of the Association for Mindfulness in Education, “[b]ut what teachers find is, if they start class with five minutes of mindfulness—movement, breathing, journaling—most teachers will report ending up with more teachable time” (Zalaznick, 2017).

Another reason mindfulness practices don’t constitute an add-on component to the school day is that they can be easily integrated into programs and initiatives that teachers are already using in their classrooms (see Figure 1.1, p. 17). Mindfulness aligns well, for example, with the ASCD/CDC Whole School, Whole Community, Whole Child framework (Giles, Hunt, Lewallen, Potts-Datema, & Slade, 2014). Mindfulness represents a key tool in the establishment of a positive social and emotional climate in school; can be used as part of the counseling, psychological, and social services of a school; and can be integrated into the health education courses in a district; and mindful stretching activities can be integrated into the physical education and physical activity component of the ASCD/CDC model. In addition, mindfulness practices can be extended to school employees, families, and the broader community (see Chapter 8 for examples of the implementation of each of these components).

Mindfulness also aligns well with the framework of Social and Emotional Learning (SEL). The Collaborative for Academic, Social, and Emotional Learning (CASEL) lists five core competencies to be
developed in SEL programs: (1) self-awareness, (2) self-management, (3) social awareness, (4) relationship skills, and (5) responsible decision making (CASEL, 2012). Mindfulness is directly related to the first two competencies. As students become more aware of their thoughts, feelings, perceptions, and sensations through mindfulness practice, they increase their own self-awareness. Similarly, by using mindfulness strategies to cope with strong emotions (e.g., by seeing them in perspective), students will improve their self-management skills. Mindfulness is also indirectly related to the other three core competencies. If we add kindness and compassion toward others as a key element in mindfulness practice (see Chapter 5), then students will be developing their social awareness (consideration of others’ experiences) and improving their relationship skills. Finally, it seems clear that mindfulness also promotes responsible decision making, because students are apt to make better decisions if they are able to reduce stress, improve self-regulation, and maintain detachment from stressful situations. (For more on the connections between mindfulness and SEL, see Dorman, 2015; Lantieri & Zakrzewski, 2015).

Mindfulness practices can also be considered part of the tool kit for all three tiers of Positive Behavioral Interventions and Supports (PBIS). As a Tier 1 intervention, mindfulness-based programs serve as a classwide, schoolwide effort to promote problem prevention and wellness. Most of the mindfulness programs that are currently being implemented are applied in this “all students” way. At the targeted level (Tier 2), mindfulness has shown promise in working with small groups of students, including those at risk of having behavioral problems (see, for example, Wisner, 2014). Finally, at the individual Tier 3 level, interventions such as Mindfulness-Based Cognitive Therapy for Children (MBCT-C), which was developed for anxious or depressed children, might be delivered one-on-one through counseling and psychological services at the school or through allied health services (see Semple & Lee, 2014).

Finally, mindfulness works as a key element within the Universal Design for Learning (UDL) framework (Rose & Meyer, 2002). In the most current version of the Universal Design for Learning Guidelines (CAST, 2018), under “Provide Multiple Means of Engagement,” is the
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Figure 1.1
How Mindfulness Aligns with Existing Education Initiatives and Programs

<table>
<thead>
<tr>
<th>Educational Initiative or Program</th>
<th>Initiative or Program Elements That Align with Mindfulness Practices</th>
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</table>
| ASCD/Centers for Disease Control (CDC) Whole School, Whole Community, Whole Child Model (WSCC) |  — Social and Emotional Climate  
— Counseling, Psychological, and Social Services  
— Health Education  
— Physical Education and Physical Activity |
| Social and Emotional Learning (SEL) programs | Core competencies:  
— Self-awareness  
— Self-management |
| Positive Behavioral Interventions and Supports (PBIS) |  — Tier 1—Delivery to whole-class, whole-school populations as problem prevention and wellness promotion  
— Tier 2—Delivery to small groups at risk of behavioral problems  
— Tier 3—Delivery to individual students as therapy through psychological services |
| Universal Design for Learning (UDL) | Provide Multiple Means of Engagement  
— 9—Provide Options for Self-Regulation  
— 9.2—Facilitate personal coping skills and strategies  
Provide Multiple Means of Action and Expression  
— 4—Provide Options for Executive Functions |

subheading “Provide Options for Self-Regulation.” As we’ve seen in the research already cited, mindfulness functions as an effective strategy for self-regulation. UDL guideline 9.2 applies particularly well: “Facilitate personal coping skills and strategies.” By teaching students mindfulness skills, we’re empowering them with practical ways of reducing stress, managing strong emotions, improving attention span, and strengthening working memory. Mindfulness also appears to
support the guideline relating to “Provide Multiple Means of Action and Expression” and its subheading “Provide options for Executive Functions.” As noted, mindfulness has been shown to be effective in improving executive functioning and thus promotes each of the options described under this subheading (goal setting, planning, managing information, and monitoring progress).

The stakes for helping our students regulate their own emotions, thoughts, and behaviors have never been higher. In one highly influential study that tracked 1,000 children from birth to age 32, self-control ability predicted later physical health, substance dependence, personal finances, and criminal offense outcomes (Moffitt et al., 2011). These findings were independent of socioeconomic status, intelligence, and “mistakes” made in adolescence. In other words, failure to develop self-control is associated with higher costs to society through poorer physical and mental health, financial difficulties, and run-ins with the law. Teaching students mindfulness practices promises to make a significant contribution toward developing those self-control abilities in our children and adolescents that are vital for their own success and for the well-being of society as a whole. And these huge returns are possible with only a few minutes of daily classroom practice. How could one say no to such an opportunity!

**Takeaways**

- Stress levels in children and adolescents are at an all-time high, and much of this stress is school based.
- Mindfulness, or the intentional focus of awareness on the present moment, has been shown in thousands of studies with adults to have a significant positive impact on cognitive and emotional functioning.
- Mindfulness practices are increasingly being implemented in schools in the United States, the United Kingdom, and Australia.
- Mindfulness practices promise to relieve stress in students and bolster their self-regulation skills, working memory, executive functioning, and social and emotional development.
• Mindfulness aligns with existing programs, including the ASCD/CDC Whole School, Whole Community, Whole Child initiative; Social and Emotional Learning (SEL); Positive Behavioral Interventions and Supports (PBIS); and Universal Design for Learning (UDL).
• By giving students self-control abilities through mindfulness practices, we can make a direct positive contribution to their future health outcomes, financial status, and social adjustment as adults.
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*Creating a Trauma-Sensitive Classroom* (Quick Reference Guide), by Kristin Souers and Pete Hall (#QRG118054)

*Cultivating Habits of Mind* (Quick Reference Guide), by Arthur L. Costa and Bena Kallick (#QRG117098)


*The Formative Five: Fostering Grit, Empathy, and Other Success Skills Every Student Needs*, by Thomas Hoerr (#116043)

*Fostering Resilient Learners: Strategies for Creating a Trauma-Sensitive Classroom*, by Kristin Souers and Pete Hall (#116014)

*The New Teacher’s Companion: Practical Wisdom for Succeeding in the Classroom*, by Gini Cunningham (#109051)

*Nurturing Habits of Mind in Early Childhood: Success Stories from Classrooms Around the World*, by Arthur L. Costa and Bena Kallick (#119017)

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