

The mindfulness-based curriculum Learning to BREATHE can help adolescents build socioemotional strengths important for navigating the unique developmental challenges of this stage of life.

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Learning to BREATHE: An intervention to foster mindfulness in adolescence

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WHY DO WE want to teach adolescents about mindfulness? Clearly, we have witnessed an explosion of research on this topic, primarily with adult samples, that documents the benefits of mindfulness practice. These benefits occur not only for individuals who suffer from an array of physical and mental health conditions but also for those who feel stressed by the more common problems of life.¹ As evidenced by this very timely special volume, mindfulness is an increasingly popular “new direction” for youth development, for it is natural to want to pass such benefits along to younger generations. This generous impulse may immediately be met with a fundamental question: how can we do this? Mindfulness is first and foremost a deeply personal experience. It requires a willingness to stop, pay attention, and open up to the whole range of experiences. It is, aptly, a *direction* rather than an endpoint. Mindfulness is the practice of being with our experience, moment to moment, without reflexively changing or dismissing it.²

There is a simplicity at the core of mindfulness that resonates with children, youth, and adults alike. Yet, it also appears that different avenues for communicating this time-tested wisdom can be helpful at different points in the lifespan. For adolescents, it is probably much easier to identify *what* they stand to gain from mindfulness practice than it is to identify *how* to engage them, especially if the teaching of mindfulness is to be done within a school setting. To answer the “how” question, practitioners must consider cognitive and emotional levels of development, emerging self-awareness, and particular strengths and vulnerabilities of the age. The systems in which adolescents are embedded, such as families, peer networks and schools, and individual differences related to culture, early experience, and special needs should be considered as well. This is, perhaps, part of what is meant when researchers and teachers advocate for *developmental appropriateness*. We know that our adolescents are traversing an exciting yet somewhat risky period of development, and we want to support them as much as possible. Mindfulness may be a particularly helpful asset on their journey toward adulthood; especially if we can understand how it best meets their needs.

In this chapter, we will present a brief argument for teaching mindfulness to adolescents that builds on other papers in this special volume. We follow with a description of a mindfulness program and its relevance to the adolescent stage of development. We then provide an example of how this approach can become part of a larger school culture.

Mindfulness: An optimal intervention

Recent research confirms that adolescence is a period when self-regulatory abilities continue to develop. Such development occurs in the context of growing autonomy, more complicated life challenges, and heightened reactivity to stress. Mindfulness is uniquely able to address these concerns. Contemporary researchers tell

us that self-regulation is influenced by top-down and bottom-up processes.³ With increased cognitive reflection and elaboration, part of executive functioning, regulatory processes become more conscious and controlled. However, these processes can be overwhelmed by bottom-up, automatic influences like arousal and anxiety. The trick is to maintain balance. Some researchers have suggested that mindfulness can be an optimal intervention to facilitate regulation because it strengthens executive control functions while simultaneously downregulating emotional interference.⁴ Through repeated practice in skills of attending, noticing distractions, and shifting focus, mindfulness supports attentional balance. Because mindfulness practice is done with the attitude of nonjudging and with curiosity, it also reduces automatic emotional interference from stress and anxiety that can degrade regulatory efforts. Mindfulness may also strengthen distress tolerance primarily through the practice of turning one's attention toward *all* experience, without preference, even if the experience is sometimes unpleasant.

Finally, teaching mindfulness to youth offers them a form of metastrategic knowledge that can be useful for the experiences and challenges that accompany their burgeoning autonomy. As a component of metacognition, metastrategic knowing has been defined as “metaknowing about procedural knowing” (p. 179) or the “knowing how” that influences problem solving.⁵ Although typically associated with strategies related to declarative knowledge, metastrategic knowing may be broad enough to apply to coping choices as well. Mindfulness teaches ways of relating to thoughts, feelings, and experiences from a decentered meta-level that can ultimately allow for better selection of problem-solving strategies and more effective responses to problems. Qualitative responses of mindfulness program participants have suggested increased meta-level understanding of the ebb and flow of life. As one high school participant put it: “I learned that I can control the way I react to things and that nothing is too overwhelming for me to handle.”⁶ Mindfulness offers emotional and regulatory skills that adolescents need as they take greater responsibility for their behavior, their

relationships, and their decisions about the ill-defined problems they confront.

Mindfulness as school-based universal prevention: Learning to BREATHE

Learning to BREATHE (L2B) is a mindfulness-based universal prevention program for adolescents that was designed to be integrated into educational settings and be compatible with school curricula. The program includes instruction in the practice of mindful awareness and provides opportunities to practice these skills in a group setting. L2B objectives are explicitly linked to standards for health, counseling, and other professional areas so that the L2B program may be incorporated into existing curricula and assessment plans. Six themes, built around the “BREATHE” acronym, form the core of the curriculum, which may be adapted for various student groups and may be presented in six, twelve, or eighteen sessions.⁷ Each lesson includes a short introduction to the topic, a choice of activities for group participation and discussion to engage students in the lesson, and an opportunity for in-class mindfulness practice. The core practices of mindfulness-based stress reduction (MBSR), body scan, awareness of thoughts and feelings, mindful movement, and loving kindness practice are adapted for younger groups.⁸ L2B is intended to enhance emotion regulation, strengthen attention and support academic performance, reduce stress, teach stress management, and help students integrate mindfulness into everyday life.

Brief summary of research on L2B

Several research studies have been done to investigate the effects of L2B on outcomes related to program objectives. The pilot study of twelfth-grade students demonstrated reductions in negative mood and improvements in calmness and self-acceptance compared to a small control group.⁹ Within the treatment group, improvements in emotion regulation skills and reductions in muscle

strain and other somatic symptoms were noted. An unpublished pilot study of fifth-grade classes in Wisconsin (<http://www.investigatinghealthyminds.org/cihmProjEducation.html>) resulted in significant improvements in spatial working memory and social competence and reductions in internalizing symptoms. Fifth graders who participated in the curriculum reported greater internal locus of control compared to comparison group. An unpublished doctoral dissertation study of small groups of students in urban (NY) and rural (WI) schools showed a significant decrease in anxiety compared to comparison groups in both settings.¹⁰ Recent findings from a study of regular education students in a Pennsylvania public high school showed significantly lower levels of perceived stress and psychosomatic complaints and higher levels of efficacy in affective regulation after program completion.¹¹ Compared to controls in a matched high school, intervention students showed gains in several emotion regulation skills including emotional awareness, access to regulation strategies, emotional clarity, and general emotion regulation. L2B has been offered in public, private, and residential schools, after-school programs, clinical settings, hospital-based settings, and correctional facilities. Overall, participants found program content and activities to be highly acceptable and socially valid in all studies.

Developmental dimensions of a mindfulness curriculum

There are many ways to teach mindfulness to adolescents. Within classrooms, taking a minute or two of silence at the beginning of class, reflective journaling, mindful listening to music, or movement are all possibilities that have been used successfully with adolescents. L2B offers an avenue for teaching mindfulness that can be useful in conjunction with all other mindful practices. The L2B program may serve as a more structured introduction to mindfulness that can resonate with other social-emotional learning (SEL) programs in format, goals, and approach. It is accessible to educators given its ability to connect with academic standards, like those of health and wellness, school counseling, or other school-based

programs. Providing students with a baseline understanding and experience of mindfulness by way of a structured curriculum can offer a springboard for other creative and sustained mindfulness practices in schools and other settings, much like a basic course in algebra can make advanced math more understandable.

L2B was created to teach mindfulness in a way that addresses the developmental needs of adolescents, teaches the core practices and some themes of MBSR, fits into the rubric of SEL, and is preventative in nature. Some specific dimensions of the program that relate to these broad aims are listed below.

Inclusive and group-centered format. Like MBSR, L2B is non-pathologizing. It assumes that everyone, including the teacher, can benefit from mindfulness, and it is therefore a helpful adjunct to health and wellness programs. L2B is a group/classroom-based program that normalizes typical adolescent issues so that self-consciousness and social comparison are reduced. There is no expectation for any self-disclosure of personal information or content. Participants are invited to try out the practices and sharing is voluntary. Case studies and exercises are based on hypothetical situations that are appropriate to adolescents in general and that may be adapted for cultural and other contextual differences. Positive approaches to social interaction are practiced through mindful speaking and mindful listening, and active learning is the primary pedagogical vehicle used throughout the program.

Cultivation of self-compassion and other positive emotions. L2B communicates a message of self-compassion to adolescents, viz. that they can “just be” as they are without needing to fix or change anything. In the fast-paced world of contemporary youth, this can be an invitation to equanimity and can reduce the tendency for self-blame in vulnerable adolescents. The practice of self-compassion is introduced from the start of the program and taught formally (in theme T) through discussion, activities about self-care, and through loving kindness and gratitude practice. L2B fosters the development of positive emotions, especially interest, at a time when the brain may be maximally sensitive to experience-dependent learning in areas of social cognition, emotion

regulation, and other executive functions.¹² Recently, Izard (2007) stated that interest and interest schema hold a position of primacy in emotion and cognitive operations.¹³ The basic emotion of interest is profoundly connected to more overtly cognitive capacities like attention, intelligence, persistence, and goal-directed behavior.¹⁴ Interest drives selective attention, from which all processing of information occurs as well as subsequent positive and negative emotions. In L2B, students practice paying attention to experience, regardless of its pleasant, unpleasant, or neutral emotional quality. Such practice facilitates the skills of inquiry into thoughts, feelings, and sensations and cultivates the orientation of curiosity and openness without judgment that can support compassion and acceptance.

Metacognitive skill support. L2B capitalizes on youth’s growing metacognitive skills by explicitly teaching about mindfulness, the mind, neuroplasticity, stress physiology, and self-care (declarative knowledge); by helping youth recognize stress triggers and when to reduce chronic stress to prevent buildup (conditional knowledge); and by teaching them the skills via in-class and at-home mindfulness practice (procedural knowledge). The metastrategic, procedural component, which is the “how” of stress management, is frequently absent from more didactic stress-reduction programs. L2B also targets youth’s tendency to overuse problem-focused solutions for emotional situations. It expands young people’s coping repertoire to include wholesome emotion-focused ways of dealing with troubling emotions and situations via practicing mindfulness of feelings (theme E and elsewhere). The overall theme (E for empowerment) is intended to strengthen self-efficacy and confidence in handling difficult circumstances when they arise.

Strengthening distress tolerance. L2B specifically targets distress tolerance skills. By reducing the tendency to react automatically to appetitive (approach) and aversive (avoid) stimuli, mindfulness practice cultivates a distinct form of awareness about one’s experience that is both highly observant and dispassionate. Thus, it potentially minimizes the risk of “jumping in” to resolve a

problem with ineffective or harmful behaviors. The practice of orienting to experience, especially unpleasant experience, with curiosity and acceptance strengthens tolerance for distress.

Building executive functions. L2B is aimed at strengthening executive functions (attention, error monitoring, flexibility, etc.) by means of mindfulness practice throughout the program. Practice in focusing attention thus supports the skills needed for learning and adaptation to the classroom.¹⁵ The practices support persistence and patience amid all the distractions of modern adolescence. The “plugged-in” brain of teenagers in the digital age, while offering some benefits such as easy access to information and social connectedness, can impede the adolescent’s ability to develop the persistence needed for deeper learning.¹⁶

Issues in implementing mindfulness-based programs in school settings

Although mindfulness-based programs are a promising approach for promoting the health and well-being of adolescents, establishing feasible and sustainable mindfulness education programs in school settings can be very challenging. Currently, very little is known about the relative effectiveness of various approaches to incorporating mindfulness-based practices or specific curricula into schools. Indeed, there are many different ways to introduce mindfulness practices, with varying degrees of structure and support. Although still an empirical question, it is likely that structured mindfulness programs with well-designed curricula and ordered scope and sequence offer several benefits in terms of effectiveness and capacity for structured evaluation.

However, many public schools face practical challenges that create barriers to the adoption, successful implementation, and sustainability of programs over time. For example, limited time in the school day to conduct program activities, decreasing availability of funds for discretionary programs, lack of staff training, and

community resistance are several factors that can have a dramatic impact on program uptake.

A useful approach to implementation may take a step-by-step process in which mindfulness-based programming is introduced to faculty and students in a gradual and ordered way. Below, we provide a recent case example of how L2B was successfully implemented and integrated into a larger-scale health and wellness initiative by a school district in Vermont. Although we recognize that this approach may not work for all districts, it does represent an example of programming across multiple grade levels that is noteworthy with regard to both scope and depth. For this chapter, we will focus on that part of the program that applied to adolescents.

Case example: South Burlington School District Wellness and Resilience Program

The South Burlington School District is a suburban district in Vermont serving approximately 2,400 students across three elementary schools, one middle school, and one high school. The early foundations of the South Burlington District Wellness and Resilience Initiative began in 2007 when South Burlington counselors partnered with university faculty to develop a new course on mindfulness called “The Heart of Learning.” In the course of pursuing this work, staff members were introduced to the Inner Resilience Program (IRP).¹⁷ District school counselors participated in IRP training, and over the course of the subsequent two years, the program developer provided direct support and consultation to the district in implementing the program. Direct support included classroom demonstrations, introductory talks for parents, and a two-day retreat for teachers. Initial funding to support program implementation was provided through a project grant issued by a private nonprofit organization and was combined with school-district professional development funds.

In the second year of the initiative, South Burlington staff invited additional trainers to present workshops on mindfulness for children and youth as in-service training. In addition to teachers, several building administrators participated as well. The district began to offer a fall and spring retreat for faculty, weekly after-school wellness activities, a monthly discussion and mindfulness practice group, and classroom coaching sessions. During the early phases of implementation, program developers provided feedback and support as needed.

At the time of the training, all students in grade 6 were required to take a six-week exploratory affective education course focused on academic and personal/social skills. In grade 7, students were taught the Drug and Alcohol Resistance Education (DARE) curriculum over a ten-week period. L2B served as a replacement for the DARE curriculum in grade 7. As such, L2B could be implemented without any reduction in student instructional time. Sessions were facilitated by guidance counselors and the assistant principal. In addition, teachers met weekly to review session activities and engage in problem solving. Teachers designed several classroom activities in reflective practices such as self-regulated breathing, relaxation techniques, attentive listening skills, focusing, and reflective journal writing. These activities complemented practices from other programs.

The most prevalent barrier to implementation during this time was staff perception that mindfulness curricula would take away from valuable instructional time. In response to these concerns, implementers emphasized that L2B was intended to replace an existing program, resulting in no additional loss of instructional time.

To help build wider support for the initiative among family and community members during this initial implementation phase, the Wellness and Resilience Initiative sponsored a parent/community book group which met monthly to discuss relevant mindfulness, wellness, and resilience-related topics. During this time, trainers introduced participants to mindfulness-based practices by integrating experiential activities into book group meetings. A

day-long retreat in the spring was provided for parents and community members.

The third year of the initiative focused on expanding and refining existing practices. Many teachers began to find creative ways to integrate mindfulness-based practices in their daily routines and activities. For example, several teachers reorganized their classrooms to create “peace corners” or “quiet corners” where student could voluntarily go for a specified period of time to engage in self-calming activities. To help support high-quality implementation of program activities, the initiative began to sponsor classroom mindfulness coaching in which a highly trained mindfulness teacher would provide live modeling for teachers in mindfulness instruction. Parent and community involvement expanded as well, and the initiative began offering free training sessions open to all South Burlington and surrounding community residents. These training sessions were open to all parent and/or community members and met on a monthly basis during the evening. Topics included subjects such as mindful parenting, developing a personal self-care practice, and how to incorporate mindfulness strategies into daily routines.

During the fourth year of the program, while maintaining existing program activities, the initiative focused on efforts to help institutionalize and sustain program practices. For example, work was begun on a training manual that documented the activities and development of the initiative. Nine district employees received additional training in order to begin training others, including individuals and schools outside the district, in their district-wide model of mindfulness in education.

As the initiative reached maturity, program leadership began to try to identify ways to ensure funding of program activities after start-up funds were depleted. Over time, the district has continued to support program funding through a mix of small private donations and foundation support. In recognition of the legitimacy of program activities, a small amount has been set aside as a line item in the general district budget. To continue to grow and expand implementation, the district has partnered with a local university

so that participants can obtain certification and/or graduate-level credits for participating in district trainings.

Summary

The available research on mindfulness with children and youth is promising.¹⁸ For adolescents, mindfulness appears to strengthen foundational skills in self-regulation, support the cognitive skills needed for learning, and expand the capacity for distress tolerance. These are skills for all adolescents, given the stress-sensitive nature of their stage of development. Since schools are the places where adolescents spend much of their time, school-based interventions may offer the best hope of a positive universal initiative. Although we have emphasized the benefits of mindfulness for adolescents in this chapter, it is also clear that mindfulness can improve the lives of the adults in schools as well.¹⁹ Along with the need for more research into the effects of teaching mindfulness to adolescents, we should also seek to explore the program-context fit. The South Burlington case example provides a useful model for understanding how to work with many levels of a system when introducing mindfulness to schools. Research focused on understanding the common barriers to adoption and “what works” best for whom (and under what conditions) is needed as well.

Finally, it is also important to recognize that empirically supported social and emotional learning programs can make an important contribution to students’ health and wellness. Yet no program, including L2B, is intended to stand alone. As we have emphasized, mindfulness is a powerful new direction, not a static endpoint nor one more quick fix. When part of a comprehensive approach that involves ongoing practice from teachers, parents, and community, evidence-based programs arguably stand the best chance of making a real difference in students’ lives. We concur with Noam and Malti’s (2008) comment about school services that “wraparound is the wrong metaphor, as the services have to penetrate every

aspect of teaching and learning” (p. 182).²⁰ We add to this the need to make what is offered relevant to the lived experience of adolescents’ daily lives. The realization that mindfulness offers, that it is possible to be present and open to their lives, can be deeply empowering to youth as they come to appreciate their own efficacy in riding the waves of experience with greater equanimity.

Notes

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